"TO STUDY ROLE OF SUSHRUTOKTA GARBHINI REGIMEN IN MISCARRIAGE UP TO 20 WEEKS."

A thesis Submitted to

Tilak Maharashtra Vidyapeeth, Pune

For the Degree of **Doctor of Philosophy (Ph. D.)**

(Vidyavachaspati) in the Ayurveda

Under the Faculty of **STREE ROGA AND PRASUTI TANTRA**

By

Vd. Mrs. SUPRIYA GUGALE

Under the Guidance of

PROF. DR. SUHAS HERLEKAR

NOVEMBER 2011

DECLARATION

DECLARATION

I hereby declare that the thesis entitled **"TO STUDY ROLE OF SUSHRUTOKTA GARBHINI REGIMEN IN MISCARRIAGE UP TO 20 WEEKS."** completed and written by me has not previously formed the basis for the award of any degree or other similar title of this or any other University or examining body.

Vd. (Mrs.) Supriya Gugale
Research Student

Place

Date

CERTIFICATE

ACKNOWLEDGEMENT

ACKNOWLEDGEMENT

The courage to do work could be gained only because of constant encouragement timely and tender guidance and exact explanation. My first vote of thanks will go to Dr. Suhas Herlekar, who has turned the obstacles in flowers. It is my pleasure to express profound gratitude indebtedness towards him, who managed to spare valuable time for guidance, supervision and encouragement for the completion of this research work within such a short period of time.

I have no words to express my deepest gratitude towards Dr. Pankaj Wanjarkhedkar , Dr.Abhijit Joshi , Dr. Subhash Ranade , Dr. Mrs Sunanda Ranade , Vaidya. D R Juvekar , Dr. S Bhonagiri who not only guided me but also encouraged to complete this work.

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. **Vd. Supriya Gugale**

Abstract

"Children are the anchors that hold a mother to life"

In almost all traditions, the importance of procreation is inherent in man's very creation. Fertility has been a constant fundamental priority and pre –occupation in all societies, throughout the ages of man. Fertility symbols are clearly identified in the relics of pre- historic times, of ancient civilizations in the all parts of world, a recognition of the concept of man's existence depends upon the renewal of fertility .Infertility is recognized as a disease by The World Health Organization and by the healthcare providers through out the world. Pregnancy loss represents one aspect of disordered fertility. Recurrent pregnancy loss has been described as the 'orphan' of infertility as this condition is often overlooked in the larger process of research and management of fertility.

The term 'miscarriage' is used to describe a pregnancy that fails to progress, resulting in death and expulsion of the embryo or fetus. Recurrent pregnancy loss is a vexing clinical problem as the cause often remains unexpected despite the major advances in genetics and immunology. Treatment is often controversial and ranges from "masterly inactivity", to an approach which could be considered as "over aggressive". The problem is distressing to couples,

Ayurved is a very ancient science of medicine of Bharat (India). From its experience of thousands of years and clinical trials it has evolved to the present maturity. After the independence it has become necessary to re-examine the Ayurvedic claims as the incidence of pregnancy loss and infant mortality is still high.

When studying the psychological effects of pregnancy loss, it is important not only to examine them through a pathological perspective, i.e., the induction of distress and depression, but also to appreciate how couples cope with this experience in their everyday life. A more general perspective would also examine the effect of pregnancy loss on self-esteem and marital and social relations.

The primary **aim** of this study is To assess the preventive role of Sushrutokta Garbhini regimen in Miscarriage up to 20 wks. In order to serve this aim , following objectives have been put forth.

1) To find out an effective and harmless substitute for modern hormonal and / or synthetic drugs
2) To preserve and continue fetal development in healthy way
3) To restore the mental stability and physical health of pregnant mother.

Sushrutokta Garbhini Regimen appears to be promising. To find out if the Ayurvedic claims are justified it was decided to clinically evaluate Ayurvedic, Sushrutokta Garbhini Regimen claim. Occurrence of number of pregnancy losses in urbanized areas is found to be more; this was also one more reason to undertake this study.

For the present study 200 patients were collected from Tanushree Garbhasanskar Kendra, New Sangvi, Pune – 411 027 during the period January 2009 to September 2010. The inclusion and exclusion criteria were followed strictly. The patients were distributed randomly either in control group or Sushrutokta Garbhini Regimen. More than 200 patients were registered for the present study in view of possible drop out cases. 30 patients added more with the Sushrutokta Garbhini Regimen and given Jain Darshan meditation with the regimen.

The study was carried out in 3 phases

1) Detail review of patients
2) Administration of drug and ahar and day to day behavior under different experimental conditions .
3) Follow-up of patients .

The Approach:

By adopting the above methodology and with defined objectives the entire work has spread over following chapters. The contents of all chapters are briefly presented below.

First chapter deals with introduction to the topic, basic concept of Miscarriage (Pregnancy loss), definition of recurrent miscarriages, need of understanding life style of today's working ladies, thoughts of our ancient acharyas on the importance of pregnancy care, need of the care. It briefly advises about the need of special care to the pregnant mother who has the history of miscarriage.

Second chapter contains ayurvediya approach towards the Garbhini paricharya. It gives the detailed information about the monthly regimen given by Sushruta for Garbhini. Masanumasik Garbh Vridhi and also Garbhopghatkar Bhavas are been thought in detail . It also includes the description of Garbh , Garbh-poshan, Garbh srav. It gives the information regarding the researches in ayurveda. Few researches are mentioned which give the information about the studies that deal with Garbhini.

In the third chapter Anatomy of uterus is been studied. In this chapter modern views are been discussed.

Forth chapter shows the hormonal aspect of menstruation. After knowing about the menstrual cycle it is easy to get the fertilization process

In fifth chapter, fertilization process tells us about all the changes happening at the time of formation of zygote.

Sixth chapter shows the pictorial view of fetal growth. After that modern views on aetiology are been thought. Mainly the psychological aspect of pregnancy loss , the grieving process , psycho neuro immunology which are very much important to know the mental aspect of the pregnant lady are discussed in detail.

After knowing the symptoms of pregnancy loss in seventh chapter test for confirmation and role of hormone support is reviewed .

Eighth chapter gives the information of the researches of pregnancy loss. They are very much informative in giving the psychological aspect of pregnancy loss.

Ninth chapter is regarding the modern antenatal care. The aspects of treatment also the treatment in miscarriages is been discussed.

Tenth chapter is about the materials and methods. Under the title of aims and objectives focuses the clinical study, materials and methods, dravya guna vidnyan . It also gives all the details of meditation and Ashta mangal Chakra dhyan.The achieve the primary aim i.e. to assess the preventive role of Sushrutokta Garbhini regimen in miscarriage upto 20 wks. The material used and the method followed is discussed in detail.

Eleventh chapter all about observations .After following the methods the detail observation is studied.

In twelvth chapter , Graphical presentation of the data is shown . The assessment is done in days and weeks.

Thirteenth chapter includes statistics and data tables. The statistical data is a detailed analysis done on the basis of observations and results.

Fourteenth chapter gives a detailed discussion on the present study. The data collected after the complete study is been thought properly.

Chapter fifteen and sixteen gives the conclusion and the scope for further study of this most sensitive topic as deals not only with physical but also mental health of the pregnant mother.

Eighteenth chapter shows all the data of clinical study in the tabular form.With the general information of the patient and also the sonography reports are also attached.

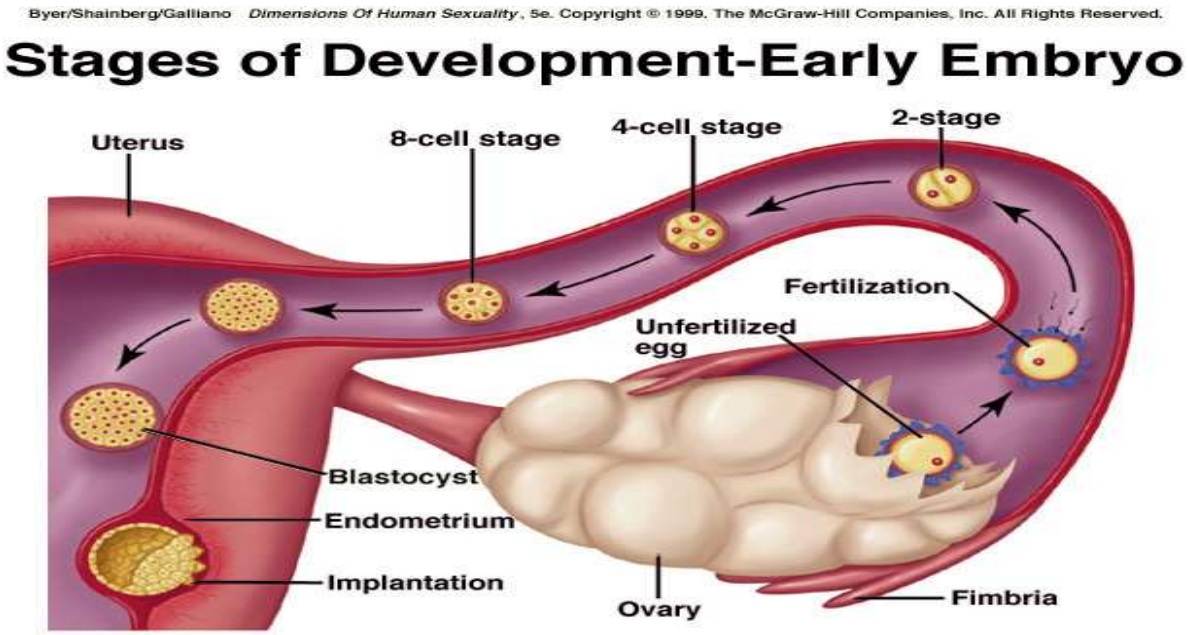
Ninteenth chapter is about the references and bibliography. The references from modern and ayurvedic text is been given.

Pregnancy loss is a heterogeneous condition, with numerous causes and numerous treatment options. It is multidisciplinary, involving gynaecology, genetics, endocrinology, immunology, pediatrics and internal medicine. Whatever the cause and possible treatment , the psychological implications are enormous. Both the partners may feel that they have failed in their parenting role .Even when pregnancy does succeed , it may be fraught with fear of another loss .This anxiety is multipled when the diagnosis remains unexplained.

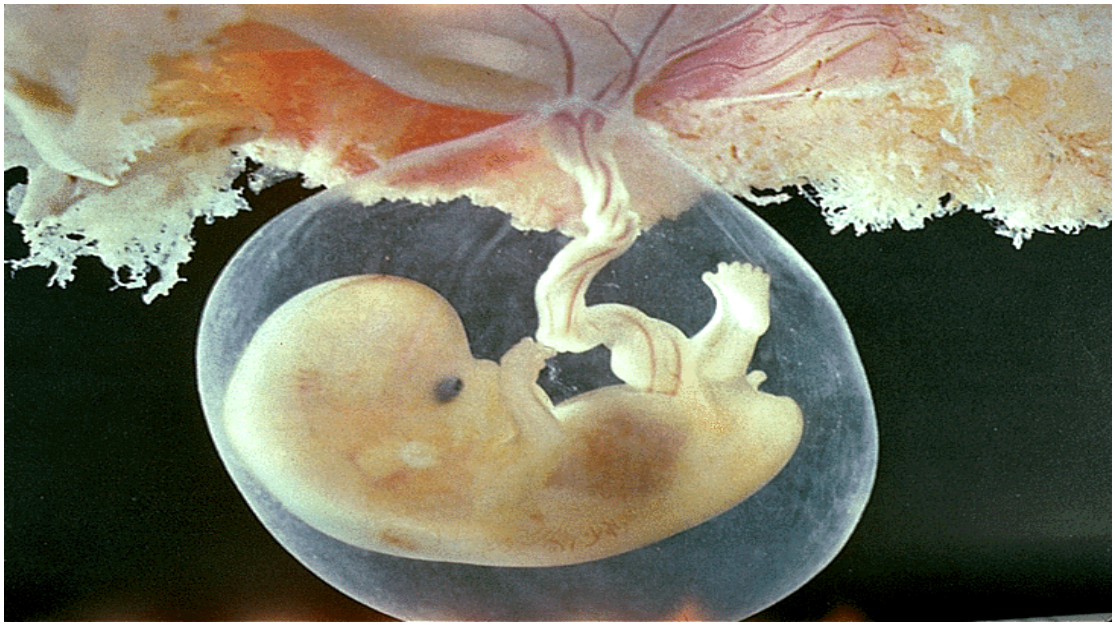
We must never forget that at the end of the line is a patient. Therefore the psychological mechanism and the connection between psychological mechanisms and the immune and other systems is welcome.

INTRODUCTION

FERTILIZATION PROCESS



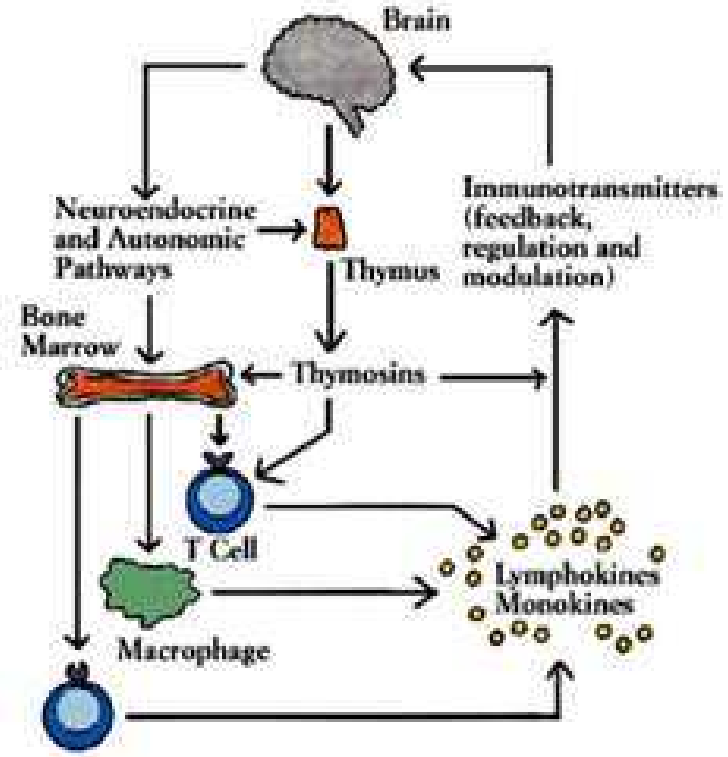
MODERN VIEWS ON AETIOLOGY



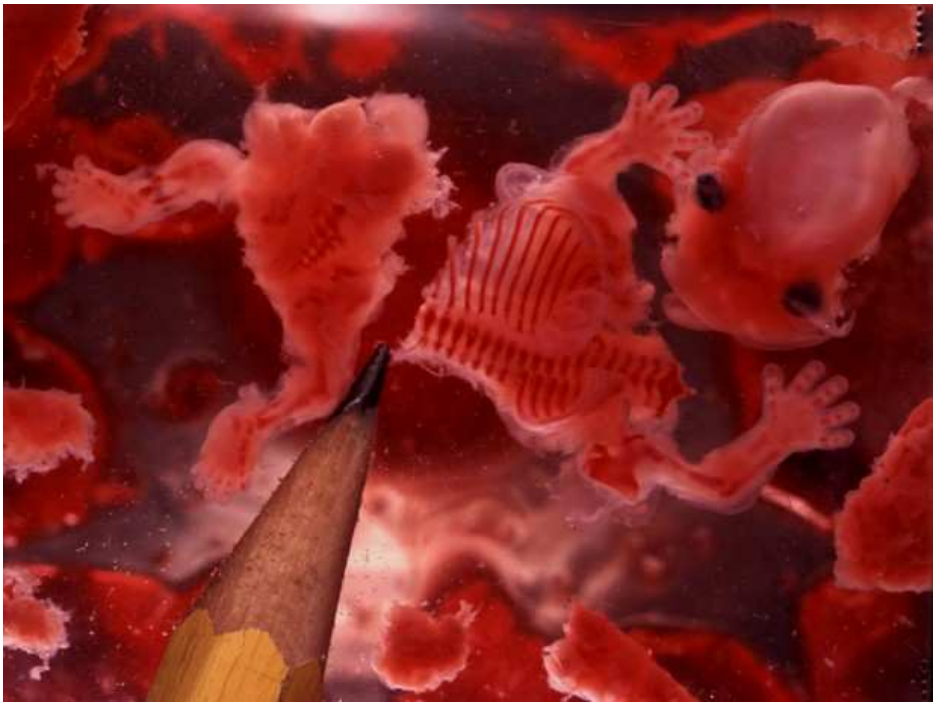
PSYCOLOGICAL ASPECTS OF PREGNANCY LOSS

THE GRIEVING PROCESS

PSYCHO-NEURO-IMMUNOLOGY



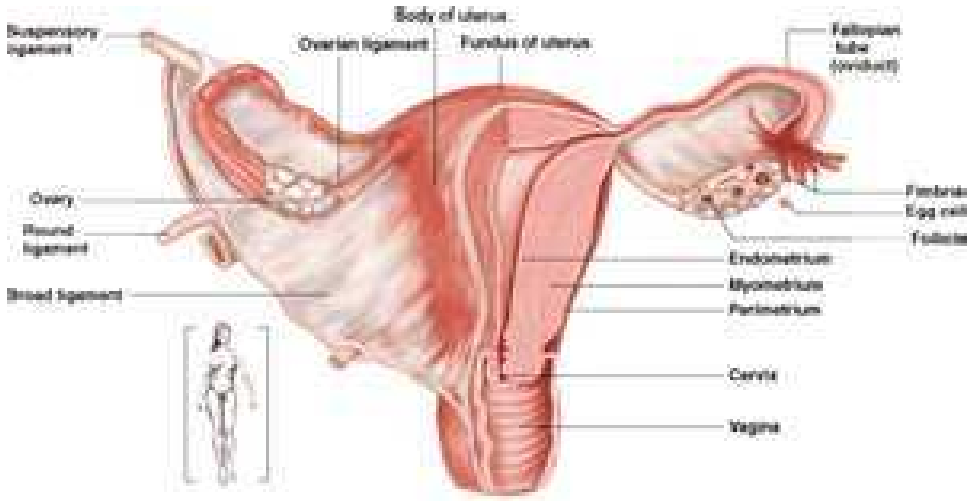
SYMPTOMS OF PREGNANCY LOSS



SCOPE FOR FUTURE STUDY :

RESEARCH ON MISCARRIAGE

ANATOMY AND PHYSIOLOGY OF FEMALE REPRODUCTIVE SYSTEM



AYURVEDIC DESCRIPTION

GARBHA POSHAN

GARBHASRAV

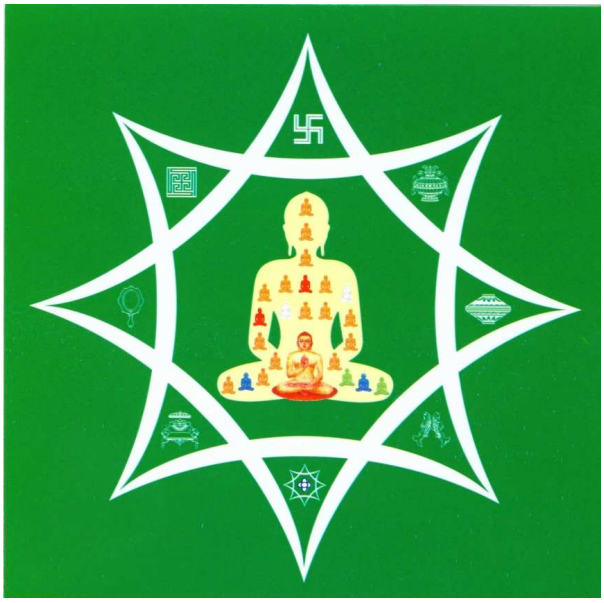
DRAVYA-GUNA-VIGYAN OF HERBS

CLINICAL STUDY – CRITERIA OF INCLUSION, EXCLUSION AND DROP-OUTS

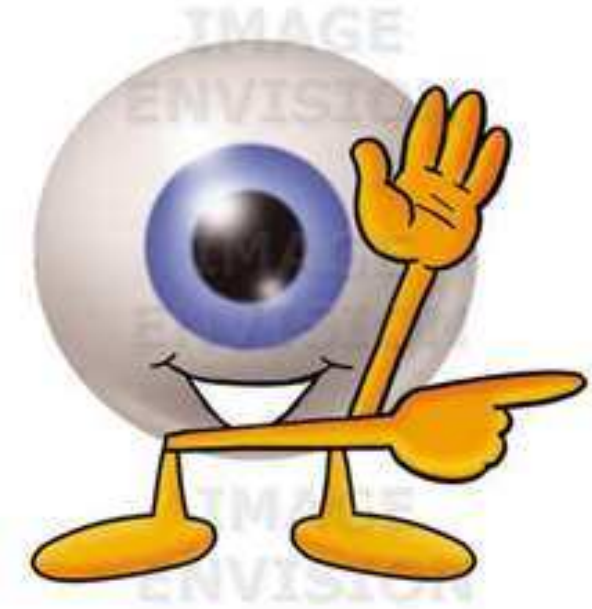
MATERIALS AND METHODS

MEDITATION-ASHTA MANGALA

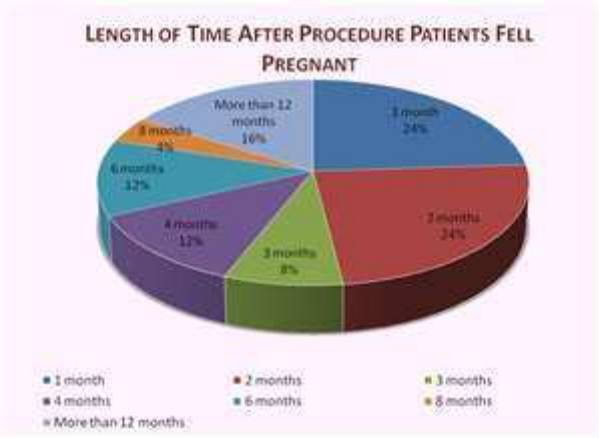
CHAKRAS



OBSERVATIONS AND RESULTS



STATISTICS


LENGTH OF TIME AFTER PROCEDURE PATIENTS FELL PREGNANT
More than 12 months 16%
1 month 24%
8 months 4%
6 months 12%
2 months 24%
4 months 12%
3 months 8%
1 month
2 months
3 months
4 months
6 months
8 months
More than 12 months

ASSESMENT IN WEEEKS

CONCLUSIONS

DISCUSSIONS

REFERENCES AND BIBLIOGRAPHY

INDEX

TITLE :- TO STUDY ROLE OF SHUSHRUTOKTA GARBHINI REGIMEN IN MISCARRIAGE UPTO 20 WKS.

Introduction :

For the would be mother bringing a new life into the world is beautiful and miraculous experience. Pregnancy is a unique, exciting, and often joyous time in a women's life as it highlights the women's amazing creative and nurturing power while providing a bridge to future.

'अपत्यानां मूलं नार्यः परं नृणाम्। च. चि. ३०.५

The loss of the anticipated bundle of joy is something that cannot be described in mere words. Miscarriage is relatively common experince but that doesn't make it any easier. Ending a pregnancy without a baby to hold in your arms is heartbreaking.

Miscarriage is one of the worst experience that a couple has to face.

But in a many cases miscarriage occurs due to ignorance or carelessness on part of woman. When a women becomes pregnant, she must realise that she is no longer alone. She is carrying another life within her womb so she must take adequate precautions to protect and nourish the baby inside her womb.

Take a step toward emotional healing by understanding what can cause a miscarriage. What increases the risk and what medical care might be needed.

Most early miscarriage (as many as 60% of the first trimester ones) will remain unexplained. It is usually assumed theses losses are genetic where the chromosomes simply did not replicate correctly. Many people will assume that something happened recently such as an illness fall or exposure to something will have caused the miscarriage.

Etiology :- More than 80% of abortions occur in the first 12 wks. of pregnancy and atleast half result from chromosomal anamolies. After the first trimester both the abortion rate and incidence of chromosomal anomoly decreases.

There are several categories of miscarriage causes

- Hormones
- Chromosome defects
- Physical problem with the uterus of cervix
- Immune Disorders
- Premature rupture of membranes or early labour
- Other and unknown - physical mental and nutritional insufficiency
- Blighted ovum. Ectopic pregnancy
- Molar Pregnancy

Ayurvedic Concept of Miscarriage

- Garbhstrava
- Yonivyapat

'आचतुर्थोत्ततो मासात् प्रसवेद् गर्भ विच्युति:।

तत: स्थिरशरीरस्य पात: पंचमषष्ठयो:। सु. नि. ८.१०

कृमिवाताभिघातैस्तु तदेवोपद्रुतं फलम्।

पतन्त्यकालेऽपि यथा तथा स्याद् गर्भविच्युति:। सु. नि. ८–९

नातिनिर्वृत्तदेहाङ्गो यस्य गर्भा विनश्यति।

दुर्धरा नाम सा ज्ञेया सुघोरा जातहारिणी।। का. सं. पृ १९२

Yonivyapat - It is only Harita who described the types of vandhya. According to Harita. Vandhya is of 6 types one of them is

i) Garbhasravi :- Means a case of repeated abortions.

Yonivyapat - When yoni is affected by various Dasha. Various types Of

female diseases (Yoni-Roga) result. This disordered genital tract cannot receive the sperm hence sterility result. Twenty types of yoni rogas are described.

Vamini Yonivyapat :

In the case sperm enters the cavity unites with ovum (Artava) but is thrown out on the sixth and seventh night by the action of Vata. It has been said that Shukra along with Raja is vomitted out by the female genital tract hence the condition is called as 'Vamini'. This act of throwing out the products of conception may or may not be accompanied with pain.

It is a well known fact that the fertilised ovum enters uterus on fourth night of coitus and remains free in uterus for two or three days. Then it gets embedded in the uterus wall on sixth and seventh night. So in Vamini Yoni due to certain cause, embedding may fail hence the products may be thrown out. If we consider the description - 'Rajasayutam' i.e. along with menstrual fluid it appears that a big vessel might get eroded. Generally the uterus controls the degree of penetration by chorion and prevents the erosion of blood vessels the disordered vata must have been responsible for the loss of uterine control on penetration by chorion there by resulting into erosion of a large blood vessel.

Putraghni Yonivyapat :

The main characteristic is that through conception taken place the ultimatum is abortion miscarriage or still birth.

From pathological point of view disordered vata especially of it Ruksha Guna and Dushta Rakta (diseased blood or ovum) are responsible for the condition. In female vata increases Rukshata - dryness, it affects her Artva (ovum) also, resulting in the death of foetus.

'गर्भोपघातकर भाव ।:

तदा प्रभृतिव्यवायं व्यायामं अतितर्पणं अतिकर्शनं दिवास्वप्नं रात्रिजागरंण शोकं यानारोहणं

भयमुक्तटकासनं चैकान्ततः स्नेहादिक्रियां शोणितमोक्षणं चाकाले वेगविधारणं च न सेवेत। सु. शा. ३.१६

गर्भिणी प्रथम दिवसात् प्रभृति नित्य प्रहृष्टा शुच्यलंकृता शुक्लवसना शान्तिमंगलदेवता ब्राम्हणगुरुपरा च भवेत्, मलिन विकृतहीनगात्राणि न स्पृशेत् दुर्गंधं दुर्दर्शनानि परिहरेत्, उद्वेजनीयाश्च कथाः शुष्कं पर्युषितं कुथितं क्लिन्नं चान्नं नोपभुंजीत, बहिर्निष्क्रमणं शून्यागारचैत्यश्मशानवृक्षाश्रयात् क्रोधमयशस्करांश्च भावानुद्यैर्भाष्यादिकं च परिहरेद्यानि च गर्भं व्यापापदयंति, न चाभीक्ष्ण तैलाभ्यंगोत्सादनादीनि सेवेत, न चायासयेच्छरीरं, पूर्वोक्तानि च परिहरेत्, शयनासनं मृद्वास्तरणं नान्युच्चमपाश्रयोपेतभसंबाधं च विदध्यात् हृद्यं द्रवमधुरप्राय स्निग्धं दीपनीय-संस्कृतं च भोजनं भोजयेत् सामान्यमेतदाप्रतवात्। सु.शा.१०.३

Aim and Objective :

To assess the preventive role of Sushrutokta Garbhini regimen in miscarriage upto 20 wks.

Material & Methods

Sample Size - 100 cases of each group + 30 Cases with meditation as an add on group.

- Open study with control

Inclusion Exclusion

1) Patients with H/O i) Known cases of Diabetes
PV bleeding in Ist trimester Hypertension
2) Patients with recurrent Immunocompramised
pregnancy loss ii) H/o Torch +ve
iii) Hepatitis B
iv) Unicornuate / Bicornuate
septate Uterus deformity.

Sereening :

The regimen will be started after the UPT positive.

Antenatal Care :

It is the care of the woman during pregnancy. It is to avoid doing

things that should not be done in pregnancy. To initiate things which are good and essential for pregnancy.

Investigations :

In early pregnancy pregnant woman will be advised to have the following tests done.

- Serum Beta HCG - To confirm pregnancy if urine test is not conclusive or help to decide the need of treatment by in case of complications. Such as presence of bleeding / spotting in early pregnancy.
- USG - This test is very useful for various gynecological conditions especially pregnancy to see for foetal pole cardiac activity.
- Pathological Investigations -

Blood Group and antibody regimen

Hemogram

Urine Analysis

HIV

Hepatitis B

BSL

- Medication - The use of medicines that are not absolutely essential should be discouraged.

Folic Acid - 5 mg - to be given daily

Follow up - 20 wks (upto)

Duration of follow up - 15 days / month

Dravyaguna (Sushrutokta)

Ist Month Yashtimadhu Extract - 60 mg

Sagbee Extract - 60 mg

Kshirkakoli Extract - 60 mg

Deodar Extract - 60 mg

Madhuka Extract - 60 mg

IInd Month Ashmantak Extract - 60 mg

Pimpali Extract – 50 mg

Krishna Til Extract - 60 mg

Manjistha Extract - 60 mg

Shatavari Extract - 60 mg

IIIrd Month Kshirkakoli Extract - 80 mg

Priyangu Extract 50 mg

Nilotpala Extract – 50 mg

Shatawari Extract – 60 mg

Shwet Sariva Extract - 80 mg

Krushna Sariva Extract - 80 mg

IVth Month Dhamasa Extract - 50 mg

Doorva Extract – 50 mg

Bharangi Extract - 50 mg

Rasna Extract - 50 mg

Sariva Extract - 50 mg

Manjstha Extract - 50 mg

Vatankur Extract - 50 mg

Vth Month Ringani Extract - 60 mg

Gambhari Extract – 60 mg

Dorli Extract - 60 mg

Vatankur Extract - 60 mg

Vatasal Extract - 60 mg

Administration 2 x 2 BD x water

Diet - Sheeta Madhur Drava Ahara (Sushrutokta)

Ist month Cold Milk Sip by sip 500 ml daily

IInd month Madhura medicine siddha milk 250 ml daily

IIIrd month Sathesali rice + milk 1 bowl

IVth month Butter 1 spoons daily

Vth month Ghee 1 spoons daily

Meditation :

For mental relaxment daily meditation with the meditation

cards will be done for 15 mins daily. Cards are made as per Jain Darshan.

Which includes Ashta Mangal Yantra and 5 diff. colours.

The main Akruti has 24 small akrutis inside it.

With full concentration all these akrutis should be observed,

all the shubha signs to be seen. Then with closing eyes for 2 mins. everything should be recalled in front of eyes. 30 cases of meditation are added in one group.

	ANC	Shushrutokta Diet	Shushrutokta Drugs
E	✓	✓	✓
C	✓		

OBSERVATION :-

It will be shown with the help of charts photographs etc.

DISCUSSION :-

With help of observation discussion will be done.

CONCLUSION :-

According to observation & discussion, conclusion will be drawn.

PLACE OF WORK :-

Tanushree Garbhsanskar kendra

Sai chowk, Siddhi Prerna Complex.

New Sangvi, Pune - 411 027

STATISTICAL ANALYSIS :-

Appropriate quantitative and qualitative statistical tests according to the sample size will be mentioned and will be followed in thesis.

Duration of work :- 1 & 1/2 year.

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samhita sthan

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213

F. Gracy Williams Vital 4 to 8 22nd

Cunningham obstretics statastics 2005

INTRODUCTION TO PREGNANCY LOSS:

अपत्यानां मूलं नार्याः परं नृणाम।

चरक चिकित्सास्थान, ३० / ५

For the expected mother bringing a new life into the world is a beautiful and miraculous experience. Pregnancy is a unique, exciting, and often joyous time in a woman's life as it highlights the woman's amazing creative and nurturing power while providing a bridge to future.

DEFINITION OF RECURRENT MISCARRIAGE:

The term 'miscarriage' is used to describe a pregnancy that fails to progress, resulting in death and expulsion of the embryo or foetus. The generally accepted definition stipulates that the foetus or embryo should weigh 500 g or less, a stage that corresponds to a gestational age of up to 20 weeks. Unfortunately, this definition is not used consistently, and pregnancy losses at higher gestational ages are also classified as miscarriage in some countries. Additionally, literature is replete with studies on women with pregnancy loss – a term that includes miscarriage and pregnancies that have ended in stillbirth or preterm neonatal death. Thus, from a definitional perspective, it is important to characterize the population being studied so that comparisons across therapeutic trials can be made more appropriately and reliably.

Recurrent pregnancy loss is a vexing clinical problem as the cause often remains unexpected despite the major advances in genetics and immunology. Treatment is often controversial and ranges from "masterly inactivity", to an approach which could be considered as "over aggressive". The problem is distressing to couples, who understandably expect answers and solutions, and frustrating for the physician who often does not have these answers, particularly in the face of ever-changing and conflicting recommendations.

Pregnancy Loss, also called: Miscarriage, Spontaneous abortion and Stillbirth. Pregnancy loss is devastating; no matter when it happens or what were the circumstances. The hopes and dreams of the couple about the unborn child are crushed. Experiencing pregnancy loss changes the patient's life in profound ways. The treatment is not only to prevent miscarriage and help in the healthy development of the foetus but also to bring out the expectant mother from the mental trauma. Miscarriage is one of the worst experiences that a couple has to face.

ध्रुवं चतुर्णां सान्निध्याद्गर्भः स्याद्विधिपूर्वकम ।

ऋतुक्षेत्रांबुबीजानां साम्यग्रादडकुरो यथा ।।

सुश्रुत शारीरस्थान २ / ३३

Ayurved is a very ancient science of medicine of Bharat (India). From its experience of thousands of years and clinical trials it has eveolved to the present maturity. Recently the development in the field of medicine could not took place because of the foreign rule. After the independence it has become necessary to re-examine the Ayurvedic claims as the incidence of pregnancy loss and infant mortality is still high. At the time of Ayurved it was advised that a woman who wants to bear children should follow certain instructions much before conception.

तस्मादहितानाहारविहारान प्रजासंपद्मिच्छन्ती स्त्री विशेषेण वर्जयेत ।

साध्वाचारा चात्मानमुपचरेद्धिताभ्यामाहारविहाराभ्याम ।।

चरक शारीरस्थान ८ / १२

Presently the life style has changed to a great extent. The cost of living is high. Female literacy has increased culminating into increasing number of women seeking jobs. This has also resulted in late marriages. The joint family system is replaced by satellite family system. Proper antenatal care is not received by many women.

Lifestyle factors are rarely, if ever, major causes of pregnancy loss ; epidemiological studies have indicated that a series of lifestyle factors can increase the risk of miscarriage.

There is good evidence that obesity, high daily caffeine intake, alcohol,anti- inflammatory drugs increase the risk of miscarriage significantly. Social class and occupation also increase the chance of miscarriage, with the greatest risk occurring in women exposed to high physical or psychological stress during work. Several studies now also indicate that previous subfertility or infertility treatment may increase the risk of miscarriage.

Many of the educated women are giving birth to defective children. Increasing mental and physical stress may also be one of the reasons. This was recognized at the time of Ayurved.

यस्य यस्य अवयवस्य बीजे बीजभाग: उपतप्तो भवति ।

तस्य तस्य अवयवस्य विकृति: उपजायते ।।

चरक शारीरस्थान ३ / ८४

Due to the advent of changing life style ,couples are keeping late attending the night parties, and indulging smoking, drinking, dancing leading to malnourished fetuses and premature births. This has unfavorable effects on mother and fetus.

Because increased maternal age increases the subsequent miscarriage rate, stratification for age should be taken into account in therapeutic trials. However,in pregnancy loss, age seems to display a significant impact on pregnancy outcome only after the age 40 years.

Consequently, it may be sufficient to stratify according to two age groups: below and above 40. Advanced age is associated with several disorders such as uterine fibroids and endocrine and autoimmune abnormalities, so age is a confounding factor that should be adjusted for when the real impact of these disorders on subsequent reproductive performance is assessed.

With increasing female age the incidence of chromosomal abnormalities seem to mainly originate from female meiosis. The higher incidence of aneuploidy compared with younger patients has been shown both when the abortus is studied, and when embryos obtained by in vitro fertilization (IVF) were studied. In the study by Rubio et alhe incidence of chromosomal abnormalities was 63.59% in the group of women above 37 years of age, and was significantly increased compared with 33.1% in a control group of women with sex-linked diseases.

To add to the problem the exercise level in working women is very low and mostly their jobs are sedentary and require sitting at one place for long times. Added to this is the diet at home and at the job. It is found that the working women eat outside in hotels and the food is of fast food type. This type of food has many unwanted ‘bad’ calories and this culminates in over weight. Most of the over weight working women suffer from diabetes, hypertension, and some kind of cardiac ailments.

बीजात्मकर्माशय कालदोषैर्मातुस्तथाऽहारविहारदोषै:।

कुर्वन्ति दोषा: विविधानि दुष्टा: संस्थानवर्णेन्द्रिय वैकृतानि।।

चरक शारीरस्थान २ / २९

Charaka Acharya says that if the proper care is taken during early pregnancy and proper drugs and proper diet accompanied with good exercise is undertaken then the woman gives rise to healthy child.

एवं कुर्वती ह्यरोगाऽऽरोग्यबलवर्णस्वरसंहनन

संपदुपेतं ज्ञातीनां श्रेष्ठमपत्यं जनयति।

चरक शारीरस्थान ८ / ३२

Pregnancy loss causes mental trauma, family disturbances, and strained relations between husband and wife and other family members. There is no satisfactory treatment for its prevention as exact causes of pregnancy loss are still unknown. On this background Sushrutokta Garbhini Regimen appears to be promising. To find out if the Ayurvedic claims are justified it was decided to clinically evaluate Ayurvedic, Sushrutokta Garbhini Regimen claim. Occurances of number of pregnancy losses in urbanized areas are found to be more; this was also one more reason to undertake this study.

AYURVEDIC DESCRIPTION (GARBHINI VYAKARAN):

The union of shukra(sperm) ,artava (ovum) and jiva(atma) inside the kukshi (uterus) is known as Garbha(zygote, embryo, fetus.). Besides atma, the association of prakruti and vikaras is also essential; after development of arms, legs, tongue, nose, ears, and hips, etc, bodyparts it is termed “sharira”

Acharya Sushruta opines that teja or heat generated at the time of coitus activates vayu, and then the shukra excreted due to the action of both vayu and teja reaches uterus , gets mixed with artava, thus formed zygote with the union of agni (artava) and soma (shukra) stays in uterus. Then the atma or jiva inspite of being akashya(imperishable), avyaya (eternal), achintya(inconceivable)but due to effect of daiva (destiny), associated with bhuta (panchamahabhutas) ,satwa, raja, tama, daiva, asura etc.bhavas and impelled by vayu reaches the uterus and stays there.

There is some difference in the events described by various authors .Charaka says that when a man copulates with a rutumati woman, then due to excitement and pleasure, the dhaturupa shukra situated in various body parts is excreted. This excreted shukra dhatu coming out of male’s body in the form of bija(sperms) enters the uterus through proper passage (vagina)and gets mixed with artava or shonita(ovum).

At the very time due to association of satwa or mana , the jivatma comes in garbha(zygote). Due to constant use of congenial diet by the pregnant woman , this Garbha grows normally and gets delivered at appropriate time with all the indriyas (sensory and motor organs), complete body parts, bala (energy), varna (complexion), satwa (endurance), samhanana (compactness) alongwith matraja (maternal), pitraja (paternal),atmaja, satmyaja and rasaja bhawas (physical and psychological components) having constant association of mana.

One should get married only after finishing the studies and becoming educated and after attaining the age of 25 years. A youth who has fulfilled this criterion is eligible to marry a young girl of the age of 12 years. But some ‘acharyas’ are of the opinion that the age of the girl should be 16 years.

Such a couple then becomes eligible to perform duties towards the ancestors (Pitrukarya), duties towards the religion (Dharmakarya) as instructed in ‘Shruti and Smruti’. They aquire the rights to earn money, gold and produce progeny. Progeny must be produced as the religion says that without progeny one cannot get a place in the heaven or cannot get the pleasures of life.

Therefore according to Ayurved and the religion married state is not to get complete satisfaction of sexual activity but to perform the religious requirements. Because producing healthy and good progeny is not for the personal, family satisfaction but also for the universal benefit and well being.

If the age at marriage is less than what is described here then the couple having lesser age cannot produce healthy progeny but it is very likely that the foetus may die in the uterus. If at all the foetus survives till full term then it becomes a weakling and unhealthy. Therefore a girl less then the age of 16 years is unfit to conceive.

Some authorities are of the opinion that the youth should be of 21 years old and the girl of 12 years of age. Further it is stated that women who are very old, suffering from chronic diseases, or suffering from some disease should not be conceived. If such women are conceived then the foetus dies in utero or if survives to full term then it is born with disease and is very weak and unhealthy.

TREATMENT FOR THE DEFECTIVE FETUSES:

In the chapter regarding ‘Garbhavakranti’ it is described that when a foetus dies in utero then there is pain in the uterus, pelvis, groin, and urinary bladder. Vaginal spotting (haemorrhage) is seen . There is excess discharge per vaginum, There may be accumulation of blood in the peritoneal cavity (Asrukdara), and fullness of stomach (Anaha).

If the foetus has shifted its normal place there is pain and irritation in the flanks. Such case should be treated with patience and oil should be used to treat it. Cooling procedures (Sheetasparsha), like treatment with drugs producing cooling effect (Sheetaveerya), should be undertaken in the form of cold compresses, cold bath, cold poultices, should be performed.

Milk medicated with ‘jeevaneeya group (gana)’ should be administered by mouth. To reduce the foetal movements milk medicated with ‘Utpaladi gana’ (Lotus family) should be given frequently.When the dead foetus starts flowing out (Garbhasrav) at this time there is burning, low backache, discharge with blood per vaginum, and continence of urine. When the foetus leaves its normal position and gets shifted to place other than the uterus then there is inflammation in the flanks (Shoth); at such a time treatment should consist of oils and fats and cooling procedures. For the reduction of pain administer milk medicated with herbs like ‘Mudgaparni’, ‘Mashaparni’, ‘Madhuika’, ‘Gokharu’, and ‘Kantakari’.

When there is contenance then administer milk medicated with ‘Pancha Truna Mool’. If there is fullness of stomach then administer the mixture of powders of ‘Hingu’, ‘Saindhava’ (Rock Salt), ‘Rason’ (Garlick), and ‘Vacha’ (Acorus calamus root). If there is bleeding then administer a mixture of spider web (Cobweb), ‘Manjishtha’, ‘Dhataki Pushpa’ (Woodfordia fruiticosa), ‘Banamalika’, ‘Geru’ (Red Bol), ‘Ral’ (Lac), ‘Rasanjan’ (aqueous extract of Berberis species), This mixture should be sweetened with honey and should be given by mouth as a linctus. Also one

can give milk impregnated with the fresh juice of ‘Vad’ (Ficus bengalensis), and leaves of ‘Ksheeree Vrukshas’.

One can also give a soft and fine slurry of the herbs from ‘Utpaladi Gana’ mixed in milk. Another alternative is to mix the fine paste of ‘Kaseru’, ‘Singhada’, Kamala Kand’ in warm milk and give by mouth. The fruits of ‘Udumbara’ (Ficus glomerata), and the tubers produced in water and mixed with sugar, honey and powdered rice are also useful to check the bleeding.

At the same time an aqueous decoction is made from the (bark of) ‘Vad’ (Ficus bengalensis) tree and in this decoction (Quath) small pieces of clean cloth is soaked and kept inside the vaginal canal to check the bleeding.

If there is only pain and no bleeding then milk medicated with ‘Jyeshthamadha’ (Glycyrrhiza glabra), ‘Devdaru’ (Berberis aristata), ‘Manjishtha’ (Rubia cordifolia), ‘Vidari Kand’ should be administered as required. Alternately milk prepared from ‘Ashmantaka’ (Boehenia verigata), ‘Shatavari’ (Asperagus recemosus), ‘Vidari’ and ‘Madhuk’ should be given by mouth. This will reduce the pain sensation, and will strengthen the foetus.

After stabilization of the foetus, administer the cow’s milk prepared from the unripe fruits of ‘Udumbar’ (Ficus glomerata) and give food.

If the abortion (pregnancy loss or miscarriage) is complete then give a porridge consisting of rice (Kodrava) without salt and fatty substances. This diey should be supplemented with digestive substances like ‘Panchakol’. This regimen should be carried out for period equivalent to the time (days) taken for the pregnancy loss (abortion).

If there is pain in the urinary bladder region then jaggory should be given along with the digestive drugs (Pachaneeya). Because of the activity of

‘prakupita’ (vitiated) Vata Dosha the foetus remains in the birth passages without movement and finally dies, at such time mild paerient (laxative) should be administered.

In Post pregnanacy loss the patient should be given porriage with plenty of ‘ghee’ (claried butter), or food items prepared from black gram, gingili seeds, unripe ‘bilwa’ fruits and half cooked wheat. In select cases home made wine can be given but only after giving honey, or wine mixed with honey. (Madhwik).

This should be administered for a week. If the foetus does not get expelled after 9 or 10 months then ask the patient to under take exercise like pounding the rice husk. If neglected then the foetus gets dried up. The dried foetus does not fill the abdominal cavity of the mother. Its movements are also weak and feeble. One can try to develop the foetal growth by giving anabolic nutrient substances, milk, meat juices. At the time of ‘Shukra – Shonita’ complex formation, Vata Dosha gets vitiated and the foetal movements become reduced or totally stopped, indicating the death of the foetus, and the condition is called ‘Nagodara’.

PREVENTIVE MEASURES: NINE MONTHS REGIMEN:

Sushrut has advised a nine month regimen to prevent the pregnancy loss in patients having history of miscarriage or pregnancy loss. It is as follows –

- **First Moth –**

Madhuka (Bassia longifolia), Sag Beej (Tectona grandis), Ksheer kakoli, Deodaru (berberis aristata), medicated milk.

- **Second Month –**

Ashmantaka (Bauhenia verigata), Black gingili seeds (Sesamum indicum), Pimpali (Piper longum), Manjishtha (Rubia cordifolia), Shatavari (Asperagus recemosus) preparations should be administered.

- **Third Month -**

Vrukshadanee (an orchid), Khreera Kakoli, Lata, Neelotpala (Blue Lotus petals), and Ananta mool (Hemidesmus anti-asthamaticus preparations.

- **Fourth Month -**

Doorva (Cynodon dyctilon), Sariva (Hemidesmus anti-asthamaticus), Rasna (Vitex negundo), Bharangi (Clerodendron serratum), Jyeshthamadha (Glycyrrhiza glabra) preparations and useful.

- **Fifth Month –**

Both types of Kateringnani (Solanum xanthocarpum and S. indicum), Gambhari (Gmelina arborea), Ksheeree tree buds and bark, and cow's ghee (clarified butter) should be administered.

- **Sixth Month –**

Prushniparni, Bala (Sida cordifolia), Shevga (Moringa oleifera), Gokharu (Tribulus terrestris), Gulvel (Tinospora cordifolia), Madhuka (Bassia longifolia), preparations in milk should be administered by mouth.

- **Seventh Month –**

Shingada (Trapa bispinosa), Kamala Kand (Nelumbium specicosum), Manuka (Vitis vinifera), Kasheruk (Scirpus grossus), Madhuk (Bassia longifolia). Preparations made of these ingredients are given in milk and crystal sugar.

- **Eighth Month –**

Kavath (Feronia elephantum), Bruhati (Solanum indicum), Parval (Tricosanthes anguina), Ikshu (Sacharrum officinarum), Kantakari (Solanum xanthocarpum). These ingredients are used to prepare a medicated milk which is administered.

- **Nineth Month –**

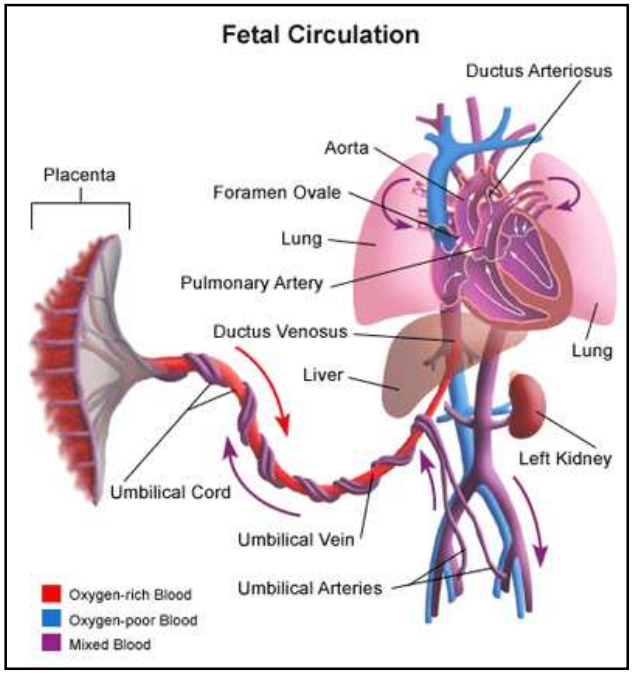
Mahuka (Bassia longifolia), Doorva (Cynodon dactylon), Kshreera Vidari, Ananta mool (Hemidesmus anti-asthamaticus). A medicated milk is prepared by boiling these herbs in cow's milk and administered in the nith month by oral route.

- **Tenth Month –**

Sunthi (Zigiber officinalis), Kshreera Kakoli is boiled with milk and administered by oral route.

By adopting this regimen it is possible to stabilize the foetus and bring about an overall healthy development of the foetus.

GARBHA POSHAN: (FOETAL NOURISHMENT):



- **गर्भ पोषण**

When foetus producing factors like mother, father circulating fluids like blood and lymph) are all normal and when the foetal nutrition is achieved through mother's foetal circulation and as the time passes the foetus grows normally.

The foetus does not have hunger or thirst. For these the foetus is dependent on mother. Foetus is a resident of mother who nourishes through the mother's blood. When the foetus grows sufficiently then its partial nourishment is achieved through the skin and its organelles.

The foetus has a chord, which is connected to the placenta which in turn is connected to the mother's heart. Mother nourishes the foetus through

‘Syandaman’ vessels. Mother’s blood contains all the required nutritional factors. Because of this arrangement the foetus receives all the nutrition as well as the strength, radiance and the colour of the skin. Only because of this arrangement the foetus remains alive till birth.

According to the opinion of Maharshi Charak complete nutrition of the foetus is through mother only. Whatever the mother eats accordingly nutritional material is prepared for the growing foetus. The diet of the mother nourishes herself, the foetus and the breast milk. From all these angles the fowtus is totally dependent on the mother and the diet and the activity pattern.

As per the opinion of Sushrut, the respiration means the inspiration and the expiration – of both the mother and the foetus is in tune with each other. Even the dreams of the mother are in tune with that of the foetus. The foetus sees the same dreams as the mother sees them in her sleep.

As the foetus is connected with the mother through the chord and the placenta the foetus receives the same ‘veerys’ as the mother possesses. The nourishment of the foetus is according to ‘Kedar Kullyaar Nyay’. According to this system the crop receives water through small channels dug in the field. The foetus also receives the nutrion just like a big tree on the banks of a lake, where the big tree does not receive water directly but indirectly by percolation. In the same way the foetus also receives the nutrition indirectly through the mother’s diet and nutrition.

The foetus remains active and awake or sleeps and rests acording to the behaviour of the mother, i.e. if the mother is awake and active the foetus is also awake and if the mother is resting or sleeping the foetus also rests or sleeps. This the foetus grows in tune with the mother’s activities and the behaviour.

Ashtanga Hrudaya writer Wagbhat and a commentator Arunadatta have also express the same opinion as above. All the authors and the commentators express that

along with the nutrition the foetus also receives ‘upasneha’ (moisture) indirectly from the mother.

- **गर्भिणी परिचर्या**

Sushruta has advised that the woman from the very first day of pregnancy should remain in high spirit, pious, decorated with ornaments,wear clean white garments and perform religious rites, do auspicious deeds and worship deities, Brahmans and priests. Her sitting and sleeping place should be covered with soft cushions or mattress., not be very high possess elevated upper portion for head rest and should be perfect and comfortable.

She should use palatable, liquid sweet and unctuous substances treated with appetizing things. This mode of life should be continued till delivery.

- **गर्भोपघातकर भाव**

Sushruta has mentioned that from the day of conception the woman should totally give up coitus exercise, excessive satiation excessive emaciation, sleeping in day time and awakening at night, grief, riding on vehicle, fear, squatting or the posture of sitting on the hams with the soles of the feet touching the ground. And avoid untimely use of Snehana, blood letting and suppression of natural urges. The coitus troubles the fetus,

She should not touch dirty, disfigured or disabled persons. She should give up foul smelling, awful appearing substances and provoking stories. She should not eat dehydrated up stale putrified or skicky food. She should avoid visiting lonely, haunted and desolate places, cremation grounds or dark and scary shade of a tree. Also she should avoid acts likely to promote anger and disgrace, and talking in high

pitch voice etc. All these things are likely to harm the fetus. Repeated excessive massage of oil and unguents should not done and she should not fatigue herself.

All these contraindications can be grouped under following head lines:

1. Those which produce psychological or physical strain such as grief or exercise etc. Though normal coitus and exercise are beneficial, however, their excessive use or psychological trauma may precipitate abortion especially in ladies prone for the same.

2. Avoidance of visit to cremation ground etc: Sudden shock may produce abnormality specially abortion.

3. Over weight carrying or vehicle riding may precipitate abortion due to sudden increase in intra- abdominal pressure; prolonged squatting in abnormal postures and supine position may influence placental and uterine blood flow (due to pressure of gravid uterus on iliac vessels) thus cause abortion, intra uterine death of the fetus or other abnormalities.

4. Dietetic regulations: Diet of pregnant mother is very important for the maintenance of her own health, proper nourishment and growth of the fetus. Texts have contraindicated use of meat, while it is already advised by Sushruta in forth and fifth month, thus here excessive use of meat of aquatic meat should be taken. Wine in little quantity is not harmful, its excessive use harms the fetus. It is difficult to explain contraindications for use of pulses, garlic and onion etc., it is just possible that their excess use may produce digestive abnormalities.

5. Use of over satiation may excessively increase the body weight of mother and fetus, over eating is one of the cause of pregnancy toxaemia. Over weight of fetus may cause difficulty in labour.

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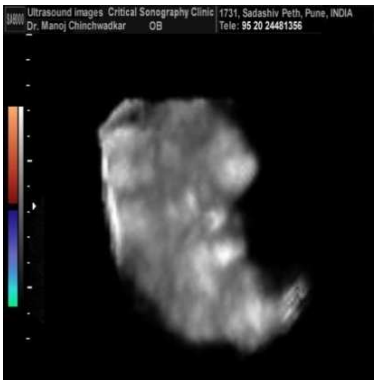
- **<u>मासानुमास गर्भ वृद्धि:</u>**

<u>The First Month</u>



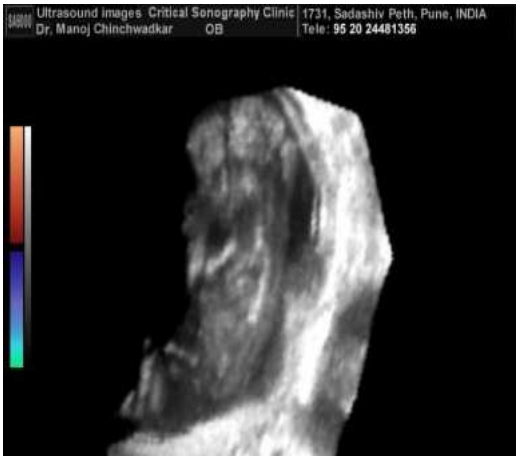
Charak says in the first month 'atma' possessing all qualities, getting mixed up by all the dhatus (bhootas) attains a shape resembling the 'shleshma' (mucoid mass) in which all the body parts are present, but they are not recognizable they are inconspicuous.According to both Sushruta and Wagbhat the first month foetus looks like a 'kalala' i.e.ajelly like mass .

Haarit says that after union of 'shukra' with 'shonita' gives rise to a soft jelly like mass (Kalala) within the first ten days. Bhavamishra is of the opinion that shukra and shonita remain in their semi-liquid state for the first month.

<u>The Second Month</u>

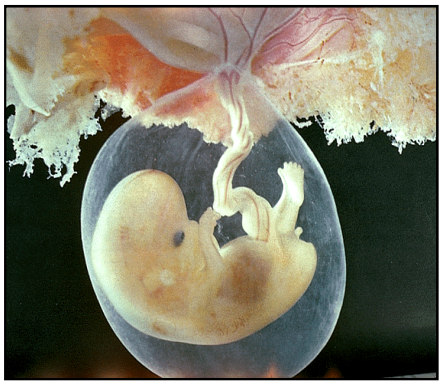
In the second month the foetus becomes a solid mass. If the mass is oval (panda) then a male child will be born. If it is elongated (peshi) then a female child will be born. If it is rounded (arbuda) then a hermaphrodite child will be born. Sushruta and Bhavmishra say that the combined action of tridoshas and the panch mahabhootas start giving shape to the jelly like mass. Harit says that within fifty days in the jelly like mass appear the 'buds'.

The Third Month



In the third month all the indriyas and minor body parts become visible like the head and the four limbs. Wagbhat opines that with the development of head the foetus is capable of feeling different kinds of sensations like sorrow and happiness. Kashyapa says that in this month the foetus starts 'quivering'.

Whereas Chakrapani Datta has mentioned that in this month the foetus gets the body hair.



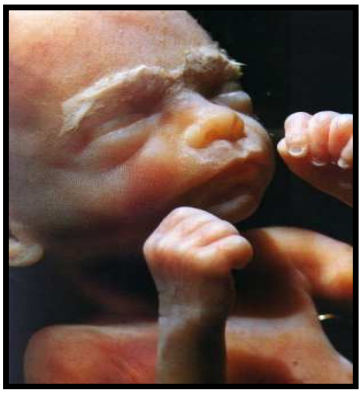
The Fourth Month

In the fourth month varios body parts become more conspicuous and clear. The foetus gets stabilized. The heart of the foetus appears. Bhavmishra, and Harit say that the head of the foetus becomes more strong and the foetus possesses hair.

The Fifth Month

In the fifth month Charak and Kashyap say that the foetus starts getting 'flesh' and the blood appears and develops. Sushruta and Bhavanishra have mentioned that at this stage 'mana' (mind) also appears. Harit has expressed that the foetus become 'sajeev' i.e. more fit to survive.

The Sixth Month



In the sixth month Charaka says the foetus becomes energetic and the foetus also gets its complexion. Both Sushruta and Bhavamishra say that the foetus gets 'buddhi' (intelligence). Wagbhat say that the foetus gets body hair, nails, tendons, blood vessels, skin and complexion.

The Seventh Month

In the seventh month all the features like muscles, blood, bones, appear and the foetus gets nourishment from the mother. All the major and minor body parts become more conspicuous and they are fully developed. The whole body of the foetus gets associated with the tri doshas and sapta dhatus.

The Eighth Month

In the eighth month due to immaturity of the fetus the 'ojus' in the fetal body becomes unstable and migrates from the fetus to the mother and back frequently. This migration takes place through 'rasavaha nadis'. Because of the shifting nature of Ojas mother and fetus become either happy or unhappy due to its presence. The presence makes them happy and its absence brings about unhappiness or sorrow. At this stage if the delivery takes place then the outcome is doubtful for the child. When the ojus is on mother's side then it is likely that the fetus delivered may be dead. Therefore a wise physician should wait till the eighth month is complete. He should preserve the fetus.

The Ninth Month

The pregnant woman should take daily bath, live a pious life, observe celibacy and should remain busy in worship of God. The oblation of meat and cooked rice should be offered to propitiate the 'rakshas' because the death of the foetus is due to 'rakshasas', which are said to be inflicted upon the child by 'rudra'.

- **मासानुमासिक गर्भिणी पथ्यकर आहार:**

Diet advised by various Ayurvedic sages is as follows:

❖ **FIRST MONTH PATHYAKARA AHAR:**

Caraka says when there is a doubt about the conception in the first month garbhini should take non-medicated cow's milk repeatedly in desired quantity according to her digestive power (Agni). Congenial diet should be taken in the morning and in the evening.

Sushrut says the diet in the first month of a garbhini should be sweet, cool and it should be liquid. This diet should be continued till the end of third month.

Wagbhat says during the first month garbhini should take medicated milk, timely and in specific quantity (according to 'agni') the first twelve days garbhini should take cow's ghee which is medicate with 'Shaliparni' and 'Palash'. Water should be boiled with gold (Suvarna Siddha Jala) or silver, cooled and administered after taking milk and ghee. Sweet, cold, liquid and congenial diet should be taken morning and evening. Body massage and oiling with massage should be avoided.

Harit says during the first month out of ‘Madhuyashti’, Parushaka’, and ‘Madhukapushpa’ available drugs should be taken with butter and honey followed by use of sweetened milk.

- **SECOND MONTH PATHYAKARA AHAR:**

Charak and Wagbhat advise medicated milk with madhura drugs. Sushruta says, Sweet, cold and liquid diet and Harit says administer sweetened milk treated with Kakoli.

- **THIRD MONTH PATHYAKARA AHAR:**

Both Charak and Wagbhat advise milk with honey and ghee. Sushrut says, Give sweet, cold and liquid diet, especially cooked Shashthi (Paddy produced in 60 days) Sali rice and milk. Harit is of the opinion that in this month ‘Krushara’ (cooked rice and pulses preparation) should be given.

- **FORTH MONTH PATHYAKARA AHAR:**

` Charak says give butter and milk. Butter should be one ‘Aksha’ in quantity. Sushruta says give cooked Shali Shashtik rice with curds. The food should be dainty and pleasant and mixed with milk and butter. Meat of wild animals can be given.

- **FIFTH MONTH PATHYAKARA AHAR:**

Charaka and Wagbhat say give butter extracted from milk. Bhela suggests ‘Yavagoo’ (soup) or rice with plenty of water while cooking should be give.

Harit says administer ‘Payasa’ i.e. cooked rice with milk and sweet substance like sugar or jaggary.

- **SIXTH MONTH PATHYAKARA AHAR:**

Charak has no advise. Sushruta says give Grut and rice medicated with ‘Gokhura’. Bhela says give Give ghruta prepared from milk. Harit says give Sweetened curd.

- **SEVENTH MONTH PATHYAKARA AHAR:**

Charak and Wagbhat advise to continue the same diet as advised in the sixth month. Sushruta says give Gruta medicated with ‘Pruthakparnyadi’ group of drugs, for proper growth and development of foetus. Harit says administer ‘Ghrutakhand’ a sweet dish.

- **EIGHTH MONTH PATHYAKARA AHAR:**

Charak advises rice gruel prepared in milk and mixed with Go-ghruta. Bhadrakapya says it should not be given to avoid child becoming tawny in complexion. Purvasu Atreya says that this will not produce tawny complexion child but the pregnant woman will remain free from diseases. The child delivered will also be healthy, energetic, having good complexion, voice, with compact body and will be much superior to other members of the family. Chakrapani Datta says since the side effects are less and benefits are more, it should be given.

Sushrut has indicated that in this month (8^{th}) for clearing the retained faecal matter and for setting the Vata dosha in proper direction ‘Asthapana Basti’ should be administered with decoction of Badari mixed with bala, atibala, shatapushpa, pestled seasamum seeds (Til), milk curd, mastu, oil, salt, madanafala,

honey and ghruta. This should be followed by ‘Anuvasana Basti’ of oil medicated with milk and decoctions of drugs from madhuara group. Due to movement of Vayu in its right direction the woman delivers without difficulty and remains free from complications. After the Bastis she should be given unctuous gruels and meat soups of wild animals. The body of woman thus treated becomes unctuous, she gains strength and delivers normally without complications. Wagbhat has incorpoarated the sugessions of Charak and Sushrut.

❖ NINETH MONTH PATHYAKARA AHAR:

Charak and Wagbhata advise use of Anuvasan Basti with oil prepared with drugs of madhura groupas advised in the eighth month. Vaginal tampon prepared with this oil is inserted for lubrication of garbhasthan and garbhamarg.

Wagbhat has prescribed meat soup and cooked rice and ghee. Rice gruel mixed with good quantity of fat is also preferred. Hart advises use of different cereals. Bhela says Anuvasana basti Kadambamasha oil should be given to evacuate the rectum. After basti give rice gruel.

- **गर्भस्राव (गर्भपात):**

The expulsion of foetus upto forth month of pregnancy is termed as 'garbha sraav'. The expelled material is in liquid form therefore it is called as 'sraava'. If the expulsion takes place in the fifth and sixth month then it is termed as 'garbha paat' because the expelled material is more solid. Bhoj is of the opinion that garbha sraav is upto three months.

Causes:

Charak says that abnormalities in the factors responsible for proper growth and development of foetus mentioned earlier can cause either intrauterine death of the foetus or its expulsion before viability.

After forth month of pregnancy anger, grief, discontent, jealousy, fear, terror, excessive coitus and physical exercise, irritation, suppression of natural urges, sitting standing and sleeping over uneven surfaces or in abnormal posture, excessive suppression of thirst and hunger and indulgence in stale food can cause bleeding per vaginum culminating in abortion. Abnormalities of shukra and vayu are major causes. Healthy shukra, shonita, 'atma', 'ashaya', 'rutukaala', and pathyakara aahara are responsible for the birth of a healthy child. Factors other than these will lead to abortion.

Sushruta says that due coitus, travelling in a carriage, riding on horse, journey on foot, stumbling over an obstacle, falling from a height, compression, running very fast, trauma by weapons like stone or whips, sleeping or sitting over uneven surfaces, fasting, suppression of natural urges, consumption of excessive, dry, hot and pungent diet, grief, diarrhea, excessive use of kharas, emetics, and purgatives, swimming, indigestion, and use of abortificient drugs, the foetus gets detached from its bonds in the same way as a fruit gets detached from its stalk due to trauma. As the fruit falls down due to infection (krimi), vata dosha, aghata (trauma, jerk) similarly

foetus also gets detached due to influence of all such factors. Physical and psychological disorders of mother and disorders of foetus are also responsible for producing foetal complications including abortion.

The conception occurring on third day of menstrual cycle, or by a man of below twenty five or a woman below sixteen years of age is also expelled. He writes further that coitus with a pregnant woman troubles the foetus and it may get aborted.

Wagbhata says that if the woman does not give up contraindicated things the abortion will occur. He says due to excessive accumulation of doshas and non-avoidance of contraindicated items, due to diseases or the influence of deeds of previous life of either the mother or the foetus, the foetus gets detached and is aborted.

REVIEW OF PREVIOUS WORK DONE

- A clinical study on sootika paricharya w.s.r to kati shodha.
- Role of positive suggestion in garbhini and prasavini paricharya W.s.r. To medical hypnosis.
- A clinical study of kikiwisa and its management with kikwisahara
- Ghrita and kikiwisahara lepa w.s.r. To striae garvidarum.
- Effect of certain Ayurvedic drugs in labour.
- A study on effect of palash patra administered during pregnancy.
- Role of certain indigenous drugs on pregnancy anemia.
- Garbhavastha Janya shodha. Ek adhyayana.
- Garbha poshana karma.
- Garbhavastha janya pandu roga.
- Garbhini paraicharya.
- Garbhavastha mein shareer kriyatmaka parivartana ka adhyayana.
- Pandu in pregnancy.

- Garbhsrav and its treatment Dr.Londhe C.S-1983
- Garbhini Paricharya by Trivedi R I-1977
- A study on the effect of Palasha patra administered during pregnancy by Reddi B S-1982
- Use of Anuvasan Basti and Pichu in 9 th month according toCharkokta Gabhini Paricharya-Vd. Jayashree More.1988
- Importance of local Snehan in Garbhini Paricharya-vd. Chetana Upalenchwar1994
- Study of 3rd month fetus according charaka and modern view.VD Mohan Shine. 1997
- Garbhini Kikwis- a study –Vd. Manisha Devkar
- Gravidogram in Normal Pregnancy 1980
- Accuracy of estimation of fetal weight by clinical and USG method.1991
- Clinical Evaluation of Charkokta Garbhini ParicharyaIn 9th month of pregnancy-Vd Satav Pradnya2009
- An experimental study of Garbhpal Rasa vis –a vis teratogenisity.- Vd. Mahejabeen Y. Shaikh2006 -2007.
- A clinical study on sootika paricharya w.s.r to kati shodha.
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- Pandu in pregnancy.

ANATOMY OF UTERUS:

The uterus is a hollow, thick-walled, muscular organ situated deeply in the pelvic cavity between the bladder and rectum

- **Structure:** The uterus is composed of three coats: an external or serous, a middle or muscular, and an internal or mucous. The serous coat (tunica serosa) is derived from the peritoneum; it invests the fundus and the whole of the intestinal surface of the uterus; but covers the vesical surface only as far as the junction of the body and cervix. In the lower fourth of the intestinal surface the peritoneum, though covering the uterus, is not closely connected with it, being separated from it by a layer of loose cellular tissue and some large veins.

The muscular coat (tunica muscularis) forms the chief bulk of the substance of the uterus. In the virgin it is dense, firm, of a grayish color, and cuts almost like cartilage. It is thick opposite the middle of the body and fundus, and thin at the orifices of the uterine tubes. It consists of bundles of unstriped muscular fibers, disposed in layers, intermixed with areolar tissue, bloodvessels, lymphatic vessels, and nerves. The layers are three in number: external, middle, and internal. The external and middle layers constitute the muscular coat proper, while the inner layer is greatly hypertrophied muscularis mucosæ. During pregnancy the muscular tissue becomes more prominently developed, the fibers being greatly enlarged.

The external layer, placed beneath the peritoneum, is disposed as a thin plane on the vesical and intestinal surfaces. It consists of fibers which pass transversely across the fundus, and, converging at each lateral angle of the uterus, are continued on to the uterine tube, the round ligament, and the ligament of the ovary: some passing at each side into the broad ligament, and others running backward from the cervix into the sacrouterine ligaments. The middle layer of fibers presents no regularity in its arrangement, being disposed longitudinally, obliquely, and transversely. It contains more blood vessels than either of the other two layers. The

internal or deep layer consists of circular fibers arranged in the form of two hollow cones, the apices of which surround the orifices of the uterine tubes, their bases intermingling with one another on the middle of the body of the uterus. At the internal orifice these circular fibers form a distinct sphincter.

The mucous membrane (tunica mucosa) is smooth, and closely adherent to the subjacent tissue. It is continuous through the fimbriated extremity of the uterine tubes, with the peritoneum; and, through the external uterine orifice, with the lining of the vagina. In the body of the uterus the mucous membrane is smooth, soft, of a pale red color, lined by columnar ciliated epithelium, and presents, when viewed with a lens, the orifices of numerous tubular follicles, arranged perpendicularly to the surface.

Into its upper part the uterine tubes open, one on either side, while below, its cavity communicates with that of the vagina. When the ova are discharged from the ovaries they are carried to the uterine cavity through the uterine tubes. If an ovum be fertilized it imbeds itself in the uterine wall and is normally retained in the uterus until prenatal development is completed, the uterus undergoing changes in size and structure to accommodate itself to the needs of the growing embryo.

After parturition the uterus returns almost to its former condition, but certain traces of its enlargement remains. It is necessary, therefore, to describe as the type-form the adult virgin uterus, and then to consider the modifications which are effected as a result of pregnancy.

In the virgin state the uterus is flattened antero-posteriorly and is pyriform in shape, with the apex directed downward and backward. It lies between the bladder in front and the pelvic or sigmoid colon and rectum behind, and is completely within the pelvis, so that its base is below the level of the superior pelvic aperture. Its upper part is suspended by the broad and the round ligaments, while its lower portion is imbedded in the fibrous tissue of the pelvis.

The long axis of the uterus usually lies approximately in the axis of the superior pelvic aperture, but as the organ is freely movable its position varies with the state of distension of the bladder and rectum. Except when much displaced by a fully distended bladder, it forms a forward angle with the vagina, since the axis of the vagina corresponds to the axes of the cavity and inferior aperture of the pelvis.

The uterus measures about 7.5 cm. in length, 5 cm. in breadth, at its upper part, and nearly 2.5 cm. in thickness; it weighs from 30 to 40 gm. It is divisible into two portions. On the surface, about midway between the apex and base, is a slight constriction, known as the isthmus**,** and corresponding to this in the interior is a arrowing of the uterine cavity, the internal orifice of the uterus. The portion above the isthmus is termed the body, and that below, the cervix. The part of the body which lies above a plane passing through the points of entrance of the uterine tubes is known as the fundus.

- **Parts of the Uterus-**

Body (corpus uteri):

The body gradually narrows from the fundus to the isthmus. The vesical or anterior surface (facies vesicalis) is flattened and covered by peritoneum, which is reflected on to the bladder to form the vesicouterine excavation. The surface lies in apposition with the bladder.

The intestinal or posterior surface (facies intestinalis) is convex transversely and is covered by peritoneum, which is continued down on to the cervix and vagina. It is in relation with the sigmoid colon, from which it is usually separated by some coils of small intestine.

The fundus (fundus uteri):

It is convex in all directions, and covered by peritoneum continuous with that on the vesical and intestinal surfaces. On it rest some coils of small intestine, and occasionally the distended sigmoid colon. The lateral margins (margo lateralis)

are slightly convex. At the upper end of each the uterine tube pierces the uterine wall. Below and in front of this point the round ligament of the uterus is fixed, while behind it is the attachment of the ligament of the ovary. These three structures lie within a fold of peritoneum which is reflected from the margin of the uterus to the wall of the pelvis, and is named the broad ligament.

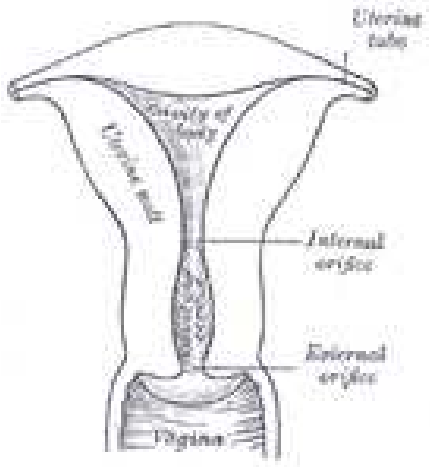
Cervix (cervix uteri; neck):

The cervix is the lower constricted segment of the uterus. It is somewhat conical in shape, with its truncated apex directed downward and backward, but is slightly wider in the middle than either above or below. Owing to its relationships, it is less freely movable than the body, so that the latter may bend on it. The long axis of the cervix is therefore seldom in the same straight line as the long axis of the body. The long axis of the uterus as a whole presents the form of a curved line with its concavity forward, or in extreme cases may present an angular bend at the region of the isthmus.

The cervix projects through the anterior wall of the vagina, which divides it into an upper, supravaginal portion, and a lower, vaginal portion.

- **Interior of the Uterus :**

The cavity of the uterus is small in comparison with the size of the organ.



Posterior half of uterus and upper part of vagina.

Cavity of the Body (cavum uteri):

It is a mere slit, flattened antero-posteriorly. It is triangular in shape, the base being formed by the internal surface of the fundus between the orifices of the uterine tubes, the apex by the internal orifice of the uterus through which the cavity of the body communicates with the canal of the cervix.

Canal of the Cervix (canalis cervicis uteri)

It is somewhat fusiform, flattened from before backward, and broader at the middle than at either extremity. It communicates above through the internal orifice with the cavity of the body, and below through the external orifice with the vaginal cavity. The wall of the canal presents an anterior and a posterior longitudinal ridge, from each of which proceed a number of small oblique columns, the **palmate folds,** giving the appearance of branches from the stem of a tree; to this arrangement the name **arbor vitæ uterina** is applied. The folds on the two walls are not exactly opposed, but fit between one another so as to close the cervical canal.

The total length of the uterine cavity from the external orifice to the fundus is about 6.25 cm. At puberty the uterus is pyriform in shape, and weighs from 14 to 17 gm. It has descended into the pelvis, the fundus being just below the level of the superior aperture of this cavity. The palmate folds are distinct, and extend to the upper part of the cavity of the organ.

During pregnancy the uterus becomes enormously enlarged, and in the eighth month reaches the epigastric region. The increase in size is partly due to growth of preëxisting muscle, and partly to development of new fibers.

After parturition the uterus nearly regains its usual size, weighing about 42 gm.; but its cavity is larger than in the virgin state, its vessels are tortuous, and its muscular layers are more defined; the external orifice is more marked, and its edges present one or more fissures.

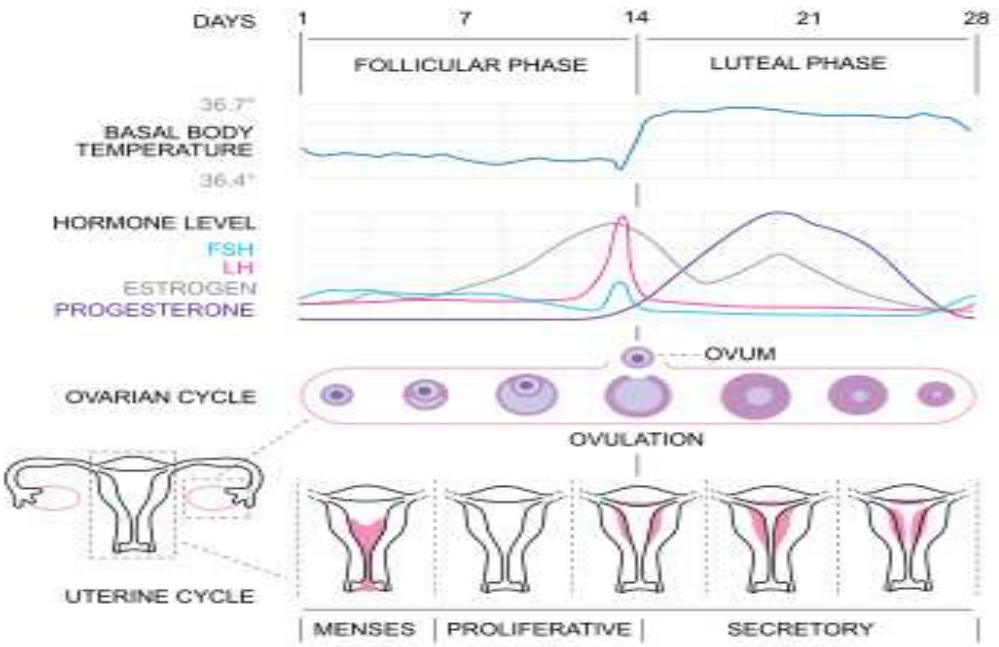
As per Ayurveda women possess one extra eighth ashaya as ‘Garbhashaya’ which is situated in the third avarta of yoni.behind the urinary bladder , in between ‘pittashaya’ and pakwashaya or in between ‘uipula kundala of srotas(multiple coils of intestine),coverd with jarayu (peritoneum). It resembles mouth of ‘rohita ‘fish.

The simile of uterus with the mouth of rohita fish might have been given probably due to two reasons i.e.

1.similarity in shape , as both triangular and hollow inside ;the mouth of fish is flat below and slightly convex above ,similarly anterior wall of uterus is slightly flat ,while posterior wall is slightly convex.

2.The lips of fish are fleshy and hanging, teeth are not just behind the lips, rather situated slightly behind these giving appearance of a rounded soft structure , which resembles cervix of uterus.

HORMONAL OVERVIEW OF MENSTRUATION



The hypothalamus in the brain secretes Gonadotropin-releasing hormone (GnRH). It seems that neural stimuli can affect the release of GnRH by the hypothalamus. Hence the temporary disturbances of menstruation are sometimes followed by emotional stress.

GnRH then stimulates the pituitary gland, situated directly below the hypothalamus, to secrete the gonadotrophins, luteinising hormone (LH) and follicle-stimulating hormone (FSH).

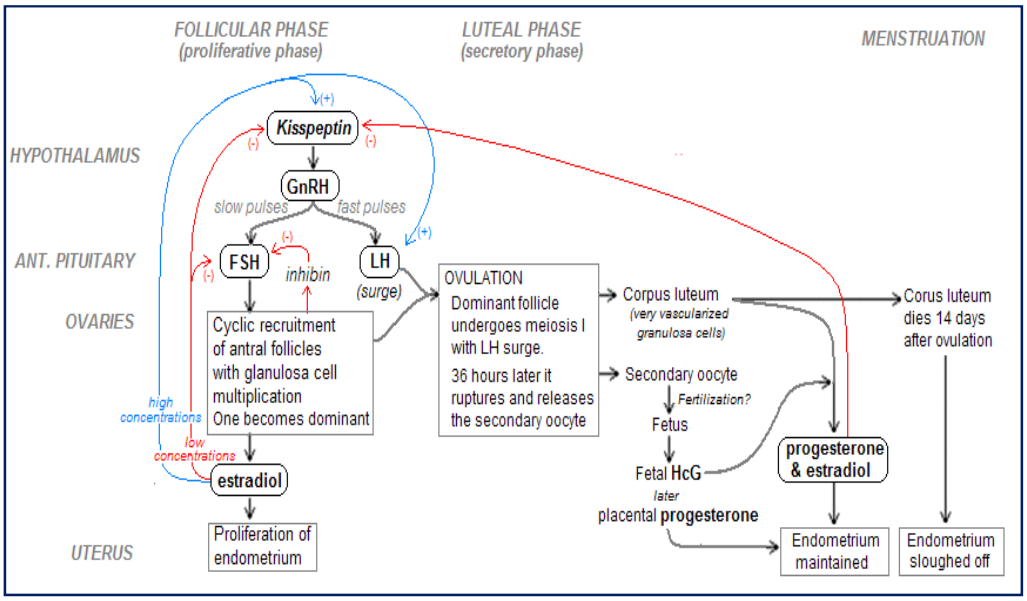
LH and FSH then act on the ovaries. FSH stimulates maturation of a follicle in the ovary as well as the release of oestrogens and an ovum, while LH, which peaks sharply in the middle of the ovarian cycle, causes the empty follicle to be transformed into a corpus luteum.

Human chorionic gonadotropin or human chorionic gonadotrophin (hCG) is a glycoprotein hormone produced in pregnancy that is made by the developing embryo after conception and later by the syncytiotrophoblast (part of the placenta). Its role is to prevent the disintegration of the corpus luteum of the ovary and thereby maintain progesterone production that is critical for a pregnancy in humans. Human chorionic gonadotropin is a glycoprotein composed of 244 amino acids with a molecular mass of 36.7. Human chorionic gonadotropin interacts with the

LHCG receptor and promotes the maintenance of the corpus luteum during the beginning of pregnancy, causing it to secrete the hormone progesterone.

Progesterone enriches the uterus with a thick lining of blood vessels and capillaries so that it can sustain the growing fetus. Due to its highly-negative charge, HCG may repel the immune cells of the mother, protecting the fetus during the first trimester. Pregnancy is a state of oxidative stress. During pregnancy, large amounts of LDL cholesterol are brought into liver for metabolism for the excessive energy requirements of the body leading to increased lipid peroxidation. Uncontrolled iron supplementation and inclement environmental factors may add to oxidative stress. Further feeble antioxidant defense, could lead to excessive oxidative stress leading to many diseases of cellular and/or tissue components.

Corpus luteum (CL) initially does not need the concepts, and can persist for a few weeks before it undergoes spontaneous regression, at menses. Therefore, the embryo-maternal dialogue required for implantation likely does not involve the CL. In humans, for example, implantation takes place 1 week before the CL would undergo regression. If the CL were involved in embryo recognition, it could take place only when there was intimate embryo-maternal contact. But this is clearly not the case, and the search for the elements involved in the early interaction has been long going. First, here, we give a brief rationale of the need for maternal recognition of the embryo shortly after fertilization.



THE FERTILIZATION PROCESS:

The released matter egg reaches the ampler region and survives for only 12-24 hours unless it is fertilized. There is a one-in-three chance of fertilization occurring. Once the sperm penetrates the egg at fertilization, it becomes ‘invisible’ to the maternal immune system. As expected, following egg/sperm fusion, there is no maternally induced immune rejection, for as long as the egg membrane does not change its characteristic (expressing foreign antigens). Once foreign antigens are expressed, the fertilized egg rapidly becomes surrounded by the zona pellucida, a hard and impenetrable shell that wards of maternal immune cells. Further immune protection is provided by maternal cumulus oophorus cells, which further prevent direct across of maternal immune cells to the embryo.

However, the cumulus cells persist only for a few days after fertilization, as their primary role is to facilitate tubal transport of the embryo towards the uterus. The cumulus has immune cells that secrete cytokines, and may serve as a first relay system for propagating embryo-derived signaling. Indeed, it has been shown that within 8 hours after fertilization, there is emargination of platelets from the peripheral blood in mice.

Embryonic cells proliferation up to the 8-cell stage is rather orderly. The blastomeres are totipotential (i.e., each of them could develop into a complete embryo) the process lasts approximately 3 days while the embryo travels within the fallopian tube. The speed is a good index to evaluate embryonic health with respect to likelihood for implantation.

Evidence that the embryo may have an active role in immune recognition was suggested by studies showing that embryo-conditioned medium has immune-suppressive properties. However, the compounds responsible for this immune effect have not been fully characterized. Further data suggested that varieties of compounds can be identified in the material circulation prior to implantation compared with non-pregnant subjects. However, whether the putative embryo-specific secreted products and circulatory compounds are the same remains unclear. If the embryo-secreted products and circulatory compounds are identical, very low concentrations of embryo-secreted compounds could reach the maternal circulation and cause changes in maternal immunity to initiate tolerance.

Obviously, this would mean that the embryo plays a role in developing tolerance even prior to implantation. This signalling would also explain pathological pregnancies in which implantation occurs in sites outside the uterus, including the fallopian tube, ovary, or even (rarely) in the abdominal cavity on the bowel. Ectopic pregnancies strongly suggest that maternal recognition of pregnancy must be systemic – not localized to the uterus.

Moreover, experience with transfer of donor (genetically dissimilar) embryo has shown high implantation and pregnancy success rates, further implanting the role of the embryo in the recognition process. There is a 4- to 5-day delay between fertilization and implantation, which is replicated in embryo transfer following in vitro fertilization (IVF). The delay suggests that this time is required to establish tolerance and prime the endometrium, making it both receptive and accommodating for the incoming embryo.

Three essential elements are required for pregnancy to succeed: a viable embryo, immune tolerance, and a receptive uterus.

Genetic factor are the most common causes of spontaneous abortion. 50% to 80% of first-trimester abortions show chromosomal abnormalities. With so many possible causes for recurrent miscarriage, it would be tempting to think that the prognosis for those women whose recurrent miscarriages are unexplained is dire.

But three-quarters of these women will go on to have a successful pregnancy if offered nothing more, and nothing less than tender, love and care, and reassurance. [Ref: Kavilier, F. Investigation of recurrent miscarriages. BMJ 2005; 331:121-2]

It is usually because of genetic problems in the foetus. Ectopic pregnancy occurs outside the uterus therefore the foetus cannot survive, as it is not its physiological and natural surrounding. In a molar pregnancy, a mass or growth forms inside the uterus at the beginning of a pregnancy, and there is no foetus. Profound grief may also result in the death of newborn. A prenatal death from trauma also comes under pregnancy loss.

A miscarriage is a loss of pregnancy from natural causes before the 20th week of pregnancy. Most miscarriages occur very early in the pregnancy, often before a woman even knows she is pregnant. Many miscarriages are attributed to

genetic factors while some of the miscarriages are considered due to recent illnesses or exposure to infections.

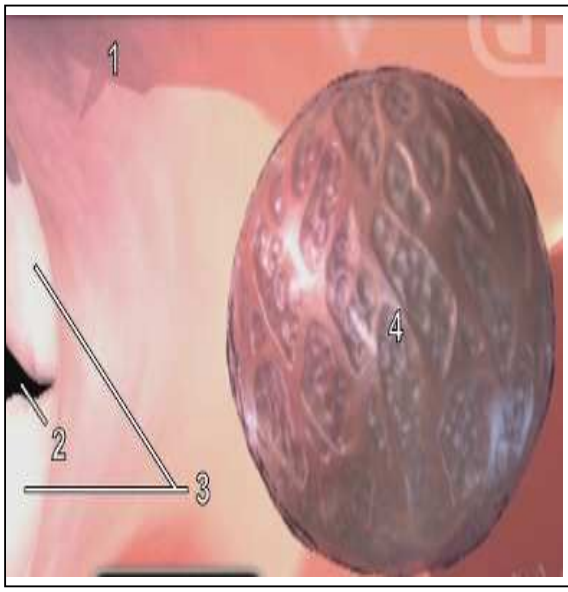
It is estimated that approximately 8-12% of all pregnancy losses are the result of endocrine factors .During the periemplantation period, the uterus undergoes important developmental changes stimulated by estrogen and more importantly, progesterone. Progesterone is essential for successful implantation and maintenance of pregnancy. Therefore, disorders related to inadequate progesterone secretion by the corpus luteum are likely to affect the outcome of the pregnancy. Luteal phase deficiency (LPD), hyperprolactenemia, and polycystic ovary syndrome (PCOS) are some examples.

Several other endocrinological abnormalities, such as thyroid disease, hypoparathyroidism, uncontrolled diabetes, and decreased ovarian reserve, have been implicated as aetiologic factors for recurrent pregnancy loss. Inhibins and activins are non-steroidal glycoproteins thought to have important roles in reproductive physiology, and have been proposed as markers of foetal viability.

MODERN ASPECT OF PREGNANCY

A PICTORIAL FLOW CHART

0-2 weeks



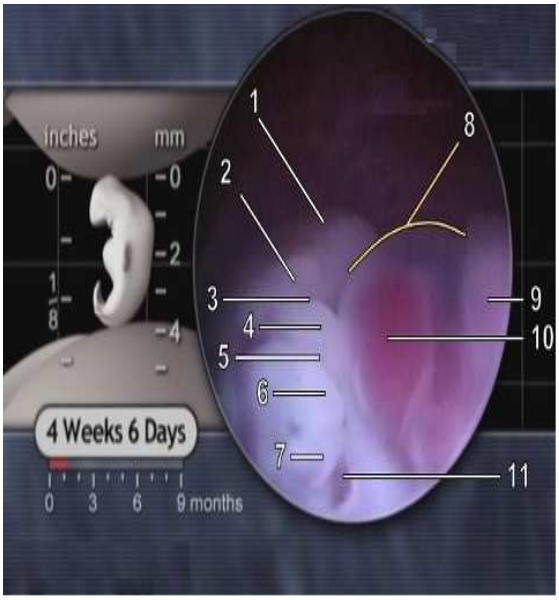
1. Inner Wall Of Uterine Tube
2. Abdominal Cavity
3. Base Of Fimbriae
4. Secondary Oocyte

4-6 weeks

A.

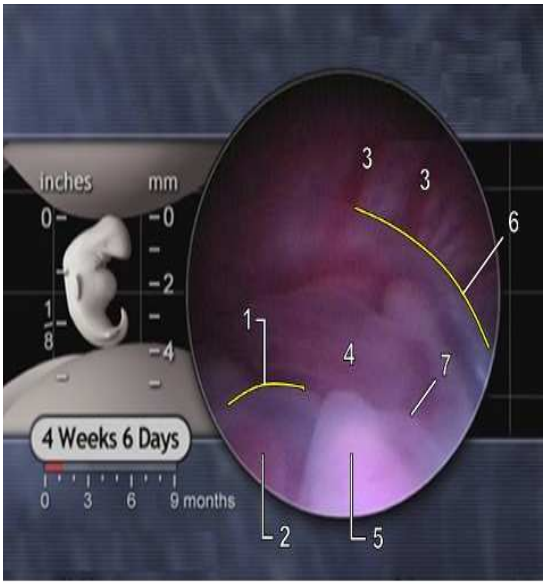
1. Midbrain
2. Hindbrain
3. Right Ear Canal
4. Forebrain
5. Right Eye
6. Chest Wall
7. Heart
8. First Pharyngeal Arch

B.



1. Forebrain
2. 1st Pharyngeal Arch (Maxillary Process)
3. Mouth (Stomodeum)
4. 1st Pharyngeal Arch (Mandibular Process)
5. Auricular Groove
6. 2nd Pharyngeal Arch
7. 3rd Pharyngeal Arch
8. Chest Wall
9. Liver
10. Heart

C.

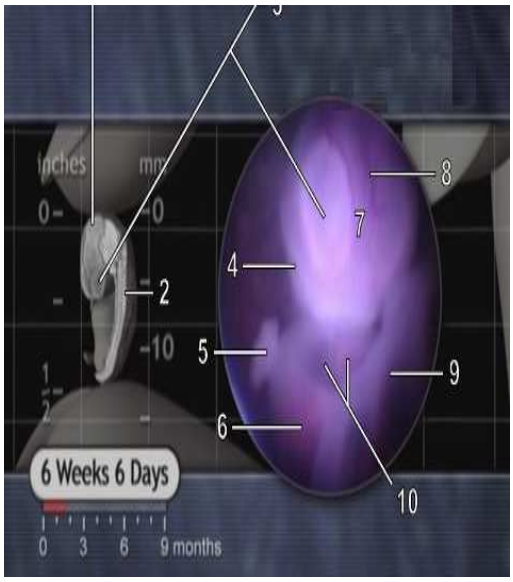


1. Chest Wall
2. Heart
3. Placental Vessels
4. Umbilical Cord
5. Liver
6. Amnion Around Embryo
7. Abdominal Wall

D.

1. Yolk Sac
2. Yolk Stalk
3. Vitelline Vessels

E.



1. Mesencephalon
2. Spine
3. Cerebral Hemisphere
4. Eye
5. Right Hand
6. Liver
7. Brain
8. Scalp Vessels
9. Umbilical Cord
10. Heart Chambers

7-11 Weeks

A.

1. Forehead
2. Left Elbow
3. Abdomen
4. Knee
5. Left Foot
6. Left Hand Touching Side Of Head
7. Back
8. Hip

B.

1. Head
2. Right Thigh
3. Right Hand
4. Knee
5. Lower Leg

C.

1. Umbilical Vein
2. Umbilical Arteries

3rd Month

1. Foot
2. Lower Leg
3. Left Thigh
4. Placenta
5. Left Knee
6. Head
7. Left Upper Arm
8. Abdomen
9. Back

4th Month

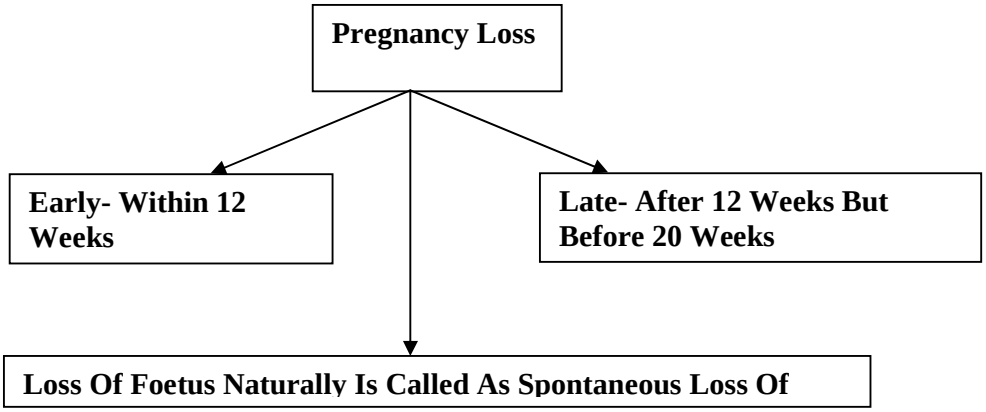
1. Scalp
2. Right Shoulder
3. Back
4. Right Elbow
5. Right Lower Leg
6. Right Thigh

5th Month

1. Scalp
2. Forehead
3. Nose
5. Umbilical Cord Around Neck
6. Chest
7. Chin
8. Eyes Closed
9. Left Ear

MODERN VIEWS ON AETIOLOGICAL FACTORS

Miscarriage or **spontaneous abortion** is the spontaneous end of a pregnancy at a stage where the embryo or foetus is incapable of surviving independently, generally defined in humans at prior to 20 weeks of gestation. Miscarriage is the most common complication of early pregnancy.



In many cases miscarriage occurs due to ignorance or carelessness on the part of couple or the family members. Sometimes it is due to the negligence of a family doctor. A pregnant woman is not alone. She is developing a life in her womb. Even though most of the miscarriages will remain unexplained it must be remembered that they can be prevented if only early and quick steps are taken in time.

Aetiology of miscarriages-

Miscarriages can occur for many reasons, not all of which can be identified. Some of these causes include genetic, uterine or hormonal abnormalities, reproductive tract infections, and tissue rejection. Few of them are as follows-

- **Chromosomal Abnormalities-**

Many such problems occur by chance and have nothing to do with the health of the mother or father. However, in a small number of cases, problems with the parents' chromosomes can cause repeated miscarriage. There are tests to find out if such problems are a factor in repeated miscarriage. At least 60% of spontaneous miscarriages occur because of a chromosomal abnormality at conception. This means that a genetically (chromosomally) defective sperm or ovum gives rise to a

genetically abnormal foetus. The miscarriage is Nature's defense mechanism, which aborts a defective foetus, rather than giving birth to a defective baby. Since most of these genetic defects are chance occurrences, the risk of it being repeated again in the next pregnancy is very small.

Sometimes a miscarriage can be linked to chromosomal problems in the foetus, medical conditions in the woman, or problems with the woman's uterus. There are tests to help your doctor determine what caused the miscarriage and in some cases treatment is available to avoid problems in future pregnancies.

More than one half of miscarriages in the first 13 weeks of pregnancy are caused by problems with the **chromosomes** of the foetus. Chromosomes are tiny structures in the cells of the body. Each carries many **genes**. Genes determine all of a person's physical traits, such as sex, hair and eye color, and blood type.

There can be problems with the number or structure of chromosomes, or with the genes they carry. Extra or missing chromosomes or genes mean the foetus will not grow as it should. Often miscarriage is nature's way of ending a pregnancy in which the foetus would not have been able to live.

Molar pregnancy, also called gestational trophoblastic disease (GTD), is rare. Both normal pregnancies and molar pregnancies develop from a fertilized egg. In a molar pregnancy, the fertilized ovum does not grow as it should. A genetic error causes abnormal cells to grow and form a mass of tissue. Ultrasound is used to find out whether the patient has a molar pregnancy.

- **Hormone Imbalance-**

Patients may miscarry because they have a luteal phase defect - that is, the amount of progesterone hormone produced after the egg is released is reduced. Progesterone is the hormone which supports the pregnancy. It helps implantation of the embryo in the uterus and if this is deficient, there can be a problem with the embryo lodging itself in the uterine lining. Progesterone is a hormone that prepares the lining of the uterus to nourish a fertilized egg. This happens during the second half of the menstrual cycle. Early in pregnancy, if progesterone levels are too low to maintain the pregnancy, miscarriage can occur. Tests can show if a woman's body is not making enough progesterone. Her doctor may prescribe medication to treat the problem.

A luteal phase defect is suspected if the menstrual cycles are short - especially if the luteal phase (the time of the menstrual cycle between ovulation and the next menstruation) is shorter than 12 days. This diagnosis can be confirmed by a blood test (a serum progesterone level done one week after ovulation is low) and an endometrial biopsy (which will show that the endometrium is "out of phase").The doctor can help provide luteal support by prescribing progesterone during the last two weeks of the menstrual cycle after ovulation. If the woman is already pregnant, treatment may be with vaginal suppositories of natural progesterone for the first twelve weeks of the pregnancy; or progesterone injections intramuscularly. However, this treatment is controversial.

- **Uterine causes**

Uterine Abnormalities and Incompetent Cervixes-

Miscarriages because of uterine problems usually occur after the twelfth week. These could be because of:

- A congenital abnormality of the uterus, which the woman is born with, but which does not cause any problems, until she gets pregnant. The common types of uterine anomalies include: a septate uterus (in which a wall divides the uterine cavity); a unicornuate uterus, in which the uterus has only one horn, because only one half has developed properly; and a bicornuate uterus, in which the uterus has two halves or horns, because the two did not fuse normally during their development in utero). This abnormal uterus cannot grow normally to hold and retain the pregnancy and this is consequently expelled. In women with a septate uterus, if the embryo implants on the abnormal tissue of the septum, the pregnancy may miscarry because the septum cannot support a pregnancy.
- Fibroids, which are growths of smooth muscle tissue inside the uterus. While most fibroids will not mar a pregnancy, if the fibroid is very close to the lining of the uterus (submucous fibroid), it will interfere with the implantation of the embryo in the uterus, and will cause its expulsion.
- Intrauterine adhesions (Ashermann’s syndrome). These are uncommon, and are fibrous bands of scar tissue in the uterus, which interfere with implantation

of the embryo. They may be formed after a uterine curettage (after an abortion) and can be diagnosed by hysteroscopy or hysterosalpingography. They can be removed by hysteroscopic surgery, allowing uneventful pregnancies in the future.

- Incompetent os, in which the cervix (mouth of the womb) is weakened. When the growing foetus presses on it, the weakened cervix opens, leading to expulsion of the growing foetus. This condition may be congenital; or because of a cervical tear or injury during previous pregnancy or miscarriage; or could be a result of over enthusiastic surgical dilatation of the cervix during previous surgery. The insertion of a cervical stitch, called the Shirodkar stitch after the Indian doctor who discovered this condition and invented the surgical operation to correct it, can be very effective. The cervical stitch is a simple surgical operation, usually done after 12 weeks of pregnancy after an ultrasound shows that the baby is healthy ; and it helps by strengthening the weakened cervix. The stitch is removed two weeks before the baby is due, or when labour starts, whichever is first.

Diagnosis of these anatomic defects can be made by hysteroscopy or hysterosalpingography. An ultrasound examination can suggest a problem exists, but usually cannot provide a definitive diagnosis. Newer imaging techniques such as 3-D ultrasound or MRI scanning can also provide useful diagnostic information. Most of these problems can be treated with surgery. The doctor will advise the patient of a proper options.

א Ovarian causes

Polycystic Ovary Syndrome (PCOS)-

Polycystic ovary syndrome is three times more likely to miscarry during the early months of pregnancy than women who don't have the syndrome. In PCOS, the ovaries produce a large amount of the LH hormone. PCOS patients also have insulin resistance, and the high LH levels and high insulin levels have a detrimental effect on the egg, so that at the time of ovulation, the egg which is released is overripe and unhealthy. If such an egg is fertilised, the embryo is also likely to be unhealthy, and is consequently rejected by the body after 6-8 weeks as a

miscarriage. Treating the abnormal insulin resistance in PCOD patients who have had repeated miscarriages with metformin helps many of them to have healthy babies .The interesting point of these studies is that it tells us that we should also be focussing on what is happening at the time of fertilisation - and not just what goes on after the pregnancy. Problems with the eggs and sperms at the time of fertilisation will manifest themselves as a miscarriage later on, but these are often neglected by the doctor.

א Immunological Disorders-

The immune system plays an important protective role in maintaining health throughout life, by defending against infection. It "rejects " the foreign invaders (bacteria, viruses) which are recognised by the body as being "outsiders". It is now becoming evident that inappropriate activation of the mother's immune system may cause early first trimester miscarriages.

Current theory suggests that during a normal pregnancy, the fetus, which carries the father's foreign genes (and is therefore immunologically foreign to the mother) can nevertheless survive in the mother' uterus because of a special protection from the mother's immune system - the uterus is a "privileged" site. This is why it is not "rejected" like other foreign tissues (such as kidney transplants) are. This means that in the normal course of events, the fertilised egg somehow stimulates a protective maternal immune response which allows implantation and growth. For certain couples, this protective response does not occur, and the maternal immune system rejects the father's foreign material in the foetus, resulting in miscarriage. Tests are available to check for this, but these are still in the experimental stage. Treatment is in the research phase too, and includes sensitising the mother to the father's genes, by injecting his blood cells into her skin; the theory being that exposure to the foreign cells will stimulate her immune system to provide the normal protective immune response when she gets pregnant.

Some women produce antibodies against the circulating substances that cause blood clotting. These are called lupus anticoagulant or anticardiolipin or antiphospholipid antibodies. They severely inhibit fetal development (by blocking off the blood supply to the foetus by causing clots in the maternal-fetal circulation) and cause miscarriages. Their presence can be detected by a blood test. Treatment is

possible, either with low doses of aspirin (which decreases the clot formation); or with a steroid (prednisone) which suppresses the mother's abnormal immune system. Antiphospholipid syndrome is a disorder of the immune system. Women with antiphospholipid syndrome are at increased risk for blood clots and pregnancy loss. Tests can be done to diagnose this condition

- **Medical Conditions-**

Certain conditions in the mother have been linked to a greater risk of repeated miscarriage. Untreated Illnesses and infections can cause repeated miscarriages. These include:

- Systemic lupus erythematosus and other autoimmune disorders in which the woman produces antibodies against her own body tissues
- Heart disease
- Severe kidney disease, mainly when linked with high blood pressure
- Diabetes
- Uncontrolled thyroid disease, especially hypothyroidism

In some cases, treating the condition can improve the chance of a successful pregnancy. This is even truer if the condition is under control before a woman becomes pregnant.

Certain infections called TORCH (which stands for Toxoplasmosis, Rubella, Cytomegalovirus and Herpes), may be a cause for a single miscarriage, but are NOT a cause for repeated miscarriages. While a number of specialists will do these tests, and even start treatment based on the results, these tests are not worthwhile for patients who undergo habitual abortion. They just waste a lot of the patient's time and money.

Although infections of the uterine cavity (for example, due to mycoplasma) are frequently thought to be a cause of recurrent pregnancy loss, substantial proof of this is lacking. Studies have in fact failed to indicate a greater incidence of infection in women with a history of miscarriage when compared to normal fertile women.

- **Certain Blood Disorders-**

Thrombophilia is a type of disorder that can make blood clot more than it should. There are several types of genetic disorders that can lead to thrombophilia. One type of disorder, Factor V Leiden mutation, may allow clots to form in the blood vessels to the **placenta** and lead to miscarriage. Pregnant women with this disorder may be prescribed blood thinners.

- **Bacterial Infections-**

Certain bacteria can cause problems, including an increased risk of miscarriage. Two in particular—mycoplasma hominis and ureaplasma urealyticum—live in the genital tracts of healthy men and women, but can raise the risk of miscarriage. In women, infection with these bacteria can inflame the endometrium (the lining of the uterus), making it impossible for an embryo to develop. There are no symptoms, however, so the only way you know if you or your partner is carrying the organism is to be tested.

- **Lifestyle** –

If patients are regularly exposed to toxic fumes and chemicals (example, workers in chemical factories; or nurses and anaesthetists in operating rooms, cigarettes, alcohol, drugs, and environmental toxins) these could damage the developing foetus (which is very sensitive to poisons) and cause a miscarriage. Recent studies show that even men exposed to environmental toxins can cause their partner to miscarry a foetus (presumably because their sperms are damaged by the toxins). Smokers, alcoholics and drug abusers also have an increased incidence of miscarriages.

- **The emotional aspects-**

Human society still tends to dismiss miscarriage complacently; it is a subject which is rarely discussed. A foetus for most people is a non-person and a miscarriage is a non-event. But, to the parents, the developing foetus is a baby with an identity, especially if you have seen it on the ultrasound screen and heard its heart throbbing with a Doppler. When the child is lost, it is bereavement and your sense of loss, tinged with pain, anger, isolation and depression, can be profound - especially when it follows a long period of infertility. After a miscarriage, it is normal to experience a period of grief. Find support from each other; and from others who have

had a similar experience. Healing does happen in time. Focus on getting through the grieving rather than on the suffering.

For many women, emotional healing takes a good deal longer than physical healing. The feelings of loss can be intense. Even if the pregnancy ended very early, the sense of bonding between a woman and her foetus can be strong. Grief can involve a wide range of feelings. One may find searching for the reasons why the pregnancy ended. In most cases it is not likely that it could have been prevented. Most women who miscarry can have a healthy pregnancy later.

DIAGNOSIS

To help find the cause of repeated miscarriage, the lady will be asked about her medical history and past pregnancies. A complete physical exam, including a **pelvic exam**, may be done. The lady may be offered genetic counselling, also may need certain tests:

- Blood tests to detect any problems with hormones or the immune system
- Chromosomal testing of both you and your partner or of the miscarriage tissue, if it is available
- Tests to detect infection of the uterus

Procedures also may be done to help detect problems in the uterus:

- Hysterosalpingography. An X-ray of the uterus and fallopian tubes is taken after the organs are injected with a small amount of dye.
- Hysteroscopy. A thin, light-transmitting device is inserted through the vagina and cervix to view the inside of the uterus.
- Ultrasound. Sound waves are used to create an image of the internal organs.
- Sonohysterogram. A vaginal ultrasound is used to view the uterus. A saline solution is injected into the uterus to help expand the uterus for better viewing.

PREGNANCY LOSS AND PSYCHOLOGICAL ELEMENTS:

Pregnancy loss here after called as (PL) is clearly a stressful experience, but very little is known about what sets its emotional effects apart from isolated spontaneous miscarriages and from other forms of infertility. When studying the psychological effects of RPL, it is important not only to examine them through a pathological perspective, i.e., the induction of distress and depression, but also to appreciate how couples cope with this experience in their everyday life. A more general perspective would also examine the effect of RPL on self-esteem and marital and social relations. The degree of emotional anguish couples experience largely depends on the significance they ascribe to PL. This meaning is influenced not only by the couple's views, but also by the perception of infertility and the view of prenatal life in their specific society.

PSYCHOLOGICAL INPACT OF RECURRENT MISCARRIAGES:

Recurrent Pregnancy loss (RPL) is a type of infertility that confronts couples with repeated cycles of hope and despair. Many couples view parenthood as an indispensable component of their marriage and many cases of RPL occur before they have a child. Young couples often take for granted their ability to conceive and become parents, and are only concerned with the question when to have a child. RPL shatters their basic expectations about family life. What is expected to be a fulfilling experience is instead an experience of loss and disappointment. These miscarriages usually occur at a very sensitive phase in the couple's development: becoming parents is a transitional stage that requires reconstruction of identities and preparation for new roles.

Only a few studies have specifically addressed the psychological difficulties of couples suffering from more than one miscarriage, focusing, as a rule, on the women. These studies suggest that the second miscarriage has harsher emotional impact than the first. (1-3) although it seems logical, the question as to whether the third and fourth miscarriages further aggravate distress has not been assessed. Surprisingly, no differences in psychological distress were found between women who have had a child and those who have not.

Perhaps mothers feel guilty for failing to provide a sibling for their child, and fear that their child feels lonely (3-5). It is estimated that around 30% of women with RPL are depressed and that even a higher proportion have high levels of state and trait anxiety. (4-5)

When women with PL conceive again, they exhibit high levels of anxiety (6), having difficulty getting through each day. This anxiety is manifested as general tension, despondence, and premonitions of miscarriage, and may be exhibited by weeping, fear of detecting bleeding when going to the toilet or examining underwear, extreme anxiety over any abdominal pain, checking continuously for signs of pregnancy, avoidance of other pregnant women, and reluctance to discuss the pregnancy with anyone, including their husband.(6-7)

As a so-called defence mechanism, some women show less emotional attachment to their subsequent pregnancies, and avoid thinking about their future child. Although this type of reaction may alleviate the constant anxiety and may protect women emotionally if eventually they miscarry, it also diminishes the pleasure women can derive from being pregnant, and may prevent grief from being processed and the experience from being integrated. In addition, it is unclear how deep into pregnancy women are less attached to their embryo and whether it complicates the transition to motherhood.

The psychological literature on PL is limited. The reaction to a sudden loss of pregnancy varies greatly among different individuals: some exhibit little or no reaction, whereas others demonstrate a significant decline in their coping ability(9,10). Major themes that describe the experience of miscarriage are emptiness and guilt.(11). Increased anxiety and depressive symptoms are also very common.(9,12,13)These depressive symptoms can include staying in bed and doing nothing, difficulty to perform daily tasks, and a feeling of a physical illness.

There is disagreement, however, as to when these symptoms decline. Several studies have found that four weeks after miscarriage, about half of the women were still depressed, and 18% of the women feared another miscarriage to the extent that they considered not conceiving again. Others have shown increased levels of depression as long as six months after miscarriage.(12,13)

An isolated miscarriage has little prognostic value. Hence, one should be cautious in drawing inferences from a single miscarriage and applying these conclusions to RPL. In RPL, each additional miscarriage reduces the prospects of having children. Consequently, the repeated nature of RPL may exacerbate the experience or teach couples to cope with it. Although never studied, the prognostic meaning the couple associates with the miscarriage can further damage their sense of well-being.

Many couples experiencing miscarriage undergo a process of grieving they mourn the lost child, their failed hopes for the child, and their unaccomplished parenthood. Unlike the grief over the death of a relative, these couples generally do not receive social support, and may also face insensitive attitudes. Sometimes, miscarriage occurs before the couple had shared the news of the pregnancy with anyone, leaving them lonely in the grieving process. It is crucial to understand that even if the embryo was lost at a very early gestational week, many couples already regard their embryo as a baby, name or nickname him, talk to him, ascribe a specific personality to him, and imagine his future. (17)

The variability in couples' attitudes may make it hard for their friends and family to support them. A break in communications sometimes occurs because of lack of response or because the couple consider the response inappropriate. Typical attempts at consolation include' At least you can get pregnant', 'Maybe it's good you miscarried, the baby was probably abnormal anyway', 'How can you grieve so much, you were barely pregnant' and 'You can always conceive again'.

While these perspectives may help some couples, many others do not want to forget their miscarried child at this time, and resist the possibility that someday they would feel as if the loss has never happened. Based on studies of general infertility, friends and family may feel guilty of their pregnancies and may sometimes try to hide their pregnancy or talk less about their children, resulting in the couple feeling distanced from their friends, which can result in social withdrawal. In addition, the couple may feel that family and friends expect that they will shortly conceive again to quickly replace their loss.

Couples may also avoid social gatherings, parties, and family occasions to avoid interactions with pregnant women or children. Some of them

cannot bear being expected to hold someone else's child or to listen to stories about the pleasures and difficulties others are experiencing when raising children. These often remind them of their loss.

One way to compensate for the lack of social support from family and friends is to seek couples who share similar experiences. (10, 18, 20)However, unlike the experience of an isolated spontaneous miscarriage, where many women had a similar experience, women suffering from PL usually do not know other women in their situation and may lack someone to truly share their feelings with. Some of their closest friends may be pregnant or already have children, making it difficult for them to feel their experience can be shared. Support groups are hard to find and there are hardly any internet forums that are specific for PL.

Apart from being emotionally traumatic, miscarriage can be physically traumatic as well; it may involve 'sudden pain, loss of blood, rapid hospitalization, and curettage. Some women identify the physical process of miscarriage as the most stressful aspect, and they may find it harder to cope with each time. (21,25)

There has been considerable research on variables that moderate the influence of miscarriage on well-being, some of which may vary with time since the loss. Identifying these moderators is essential to understand the variability in response to the loss, and, more importantly, it points at potential targets for psychological interventions. Some of these mediators are uncontrollable - for example, young age is associated with lesser well-being, and a later gestational week of miscarriage has harsher psychological consequences.

However, other factors can be controlled and are associated with adverse well-being: these include attributing high personal significance to miscarriage, low investment in domains of life other than parenthood, and low satisfaction in other aspects of life, such as work, lack of social support, lower emotional strength, and use of passive coping strategies. In contrast, women who reported that the recurrent miscarriages taught them to place greater value on their relationship with their spouses and to change priorities or personal goals scored higher on well-being.

Coping with infertility has been much explored over the last 50 years. Many researchers describe infertility as a crisis having psychological effects,

including loss of self-esteem, increased anxiety, sexual problems, anger, depression, and self-blame. The uncertainty of having biological children evokes a sense that life is unpredictable and that significant events in life are not under control. Loss of self-esteem, guilt, and self-blame may be even more evident in women suffering from PL. Unlike many fertility problems, where the cause is either unknown or is attributed to both partners, in PL, women feel that they are to blame because it was their body that betrayed and could not support the pregnancy. This feeling is reinforced by the medical examinations that couples undergo: most clinical examinations evaluate possible aetiologies in the women.

An aspect that is unique to PL among fertility problems is the period when women are most stressed and anxious. In most fertility problems, getting pregnant is the aim, and, once achieved, the mission has largely been accomplished. In contrast, this period is usually the most stressful for women who have experienced PL, and the anxiety level may peak around gestational weeks when previous miscarriages occurred. This anxiety is reflected by extreme sensitivity to body signals, and increased fear that miscarriage will happen again. The decision to conceive again is often very hard, because women have to consider whether they can bear another miscarriage. In the interviews with women with PL, they have often spoken about times that are problematic for them to conceive, such as major holidays when they have to face family members.

THE GRIEVING PROCESS:

Couples experiencing PL will often grieve for their lost children, their lost parenthood, their biological failure, the loss of control over their life, and for the possibility that they would not have biological children.(12,25) Unlike losing a child, the couples do not have memories of the baby, and their loss is often not acknowledged by society.(10) There are no rituals associated with mourning a miscarriage. Couples may feel reluctant to share the experience with others, often cannot take days off from work, and may lack the time they would like to grieve for the loss. Couples may also be torn between their hopes for a successful pregnancy and their grief.

This grief process is often characterized by intense fluctuations in emotions, ranging from crying to laughing to being angry. This grief process may last for months and even years, and often extends into the subsequent pregnancies that serve as reminders for previous losses and can trigger intense emotions. Many couples may be very surprised by their mood swings and the intensity of the emotions that they experience. They may not be aware that this is a normal reaction to their loss. It is very important to reassure them that their reaction is normal and common.

Although there is no single right way to grieve, several stages of grief are commonly experienced by people. There is disagreement whether all people pass through each of these stages, and people differ in the time they spend at each stage. In councelling the following steps are important.

1. **Denial, shock and numbness-** This stage often begins with the shock that another miscarriage has occurred and is characterized by the feeling that 'this can't be happening to me'. Sometimes, the couples will not even admit to themselves that something may be wrong. This reaction serves as a defence mechanism, and will usually diminish as couples begin to acknowledge their loss, usually within hours to days. This emotional numbness and denial should not be confused with 'lack of caring'.(27,28)

2. **Anger-** During this stage, the couple is preoccupied with the miscarriages that they had. A feeling of unfairness surrounds these thoughts: 'Why me? Why us?' The couple also experiences an intense yearning for the lost child, for the lost parenthood,

pregnancy, and dreams. The anger associated with the unfairness of the entire experience can focus on the pain and inconvenience associated with miscarriage, with the tests and treatments, with the social pressure they feel from their family and friends, and on comments regarding their miscarriages and childlessness. The anger may also include broader targets such as abortion rights advocates, people who easily carry to term, and the medical team. Social support and respect can help abate this anger.(8,27)

3. **Isolation**-Many couples exhibit social withdrawal. This often happens because couples try to hide their pregnancies and miscarriages, do not want to be judged or pitied by others, or avoid occasions where they might meet children or pregnant women. They also feel that their experience is unique, and that others whose experience of being pregnant is joyous cannot comprehend what they are going through. Moreover, peers and family members often avoid discussing the recurrent miscarriages with the couples — either because they are embarrassed with the ease of their having children or because they do not want to disrupt the couple's privacy.(27)

4. **Guilt**- Women sometimes feel that the recurrent miscarriages represent punishment for something they did. They may regret actions they took or failed to take prior to the miscarriages.(8,27)

5. **Depression-** At this stage, there is full penetration of the distress and facing the loss. Thoughts such as 'My life is over, I can't go on' or 'I don't care any more' are very frequent. Some women may feel a sense of great loss, mood fluctuations, and loneliness.(4)

6. **Rebuilding and healing**- There is disagreement whether complete healing can occur. Still, at this stage, the couple start to deal with the reality of the situation. They restructure the event, organize their activities, and plan to move forward in life, and become more energetic and social.

DOMAINS OF EMOTIONS AND LIFE THAT ARE AFFECTED:

RPL can affect many domains in a couple's life; from self-esteem to relationship with others, and even to financial costs. Here is a list of the main domains that are affected:

- **Self-esteem:** Most people view the ability to conceive and have children as central to their personal identity. Our socialization process teaches girls and women to view motherhood as an integral part of their self-worth and femininity. In several religions, 'Reproduce and fill the earth' is one of the most important precepts. Consequently, not reproducing is often perceived in traditional societies as a degrading failure - impinging on self-esteem and putting in question the woman's femininity and worth as a spouse.(21,25)
- **Loss of control:** For many women, RPL is the first experience of a major loss of control: they lose control over their life, their body, and their ability to plan the future. Some of this planning includes the time of conception (e.g., the best time to be absent from work, when it fits well with their and their spouse's career plans), and plans for adequate housing for an expanding family.(6,15,25)

- **Relationship with peers:** Couples may feel excluded from friends whose interests focus on children, and may seek new reference groups to belong to. Difficulties in facing pregnant women and young children also lead couples to avoid peers who are pregnant or already have children. In addition, their friends may feel uncomfortable in disclosing their pregnancies, and this may be misinterpreted by the couple as a sign of alienation. In contrast to many other fertility problems and despite the fact that PL is not so rare, many women with PL do not know other women in the same situation to whom they can relate(15,25)
- **Marital stress:** While the experience of infertility can improve marital

  adjustment for some couples, it may damage the relationships of others and increase marital stress. This may result from differences between the spouses in the attitude toward the losses, in the grief response, and in their motivation to have children. In addition, women may feel guilty for failing their spouse's expectations, and may feel responsible for his pain. Many women fear that their partner would leave them to find someone else with whom to have children. Pressures to have children from the husband's family can further exacerbate this fear.(4,15,30)

- **Sexual Life:** RPL, like other fertility problems, may increase sexual discontent. Couples may feel a pressure to quickly conceive again, and with it an increased demand to have sex at certain times. Not being in the mood or being absent due to various reasons such as business trips may increase the tension.(,32,31)
- **Financial cost:** In addition, RPL frequently taxes couples with financial costs: visits to a specialist, tests, treatment, and absence from work.

ROLE OF MALE PARTNER:

Spouses are often very lonely in their experience of RPL. Women are, after all, considered the main patients - they experience the physical miscarriage, their reproductive system is assumed to hold the cause, and they are subject to most diagnostic tests. The idea that the spouse may also experience intense grief is often forgotten by society, by the couple's acquaintances, and by the medical team.

Compared with women, the grief of male partners is less active and is expressed for a shorter duration. Men are often ready lo carry on with their lives earlier than women, and are also less interested in discussing the miscarriage repeatedly. (9,21)

Spouses frequently find themselves in a very delicate position: at the same time, they endure a crisis, grieve, and need support, they feel that they ought to be strong to emotionally support their partners. As a result, spouses suppress their feelings of loss instead of sharing it with their partners. Moreover, if the woman is depressed, they often feel that they are not doing a good job of supporting her. They may struggle to say the right words, and fear that what they say would make their partners feel worse. Many of them fail to realize that their female partners want to know that their grief is shared by others. Also, although the spouses may have the best intentions of providing support, there are sex differences in coping strategies with life stressors, and males tend to give instrumental rather than social support, leaving

women feeling unsupported and the male partners feeling guilty and unappreciated.(33,34)

ROLE OF THE PHYSICIAN:

Although the physician and the couple share the desire for pregnancy to succeed, the cooperation between them is complex and may be very vulnerable. The challenge with which the physician is confronted when first seeing couples with RPL is almost impossible. Usually, the time that can be devoted to each couple is very limited when the routine components of a medical consultation are considered: taking a history, sorting and interpreting the results of previous investigations, explaining the problem and its possible causes, subsequent prognosis, suggesting additional investigations, answering the couple's questions, and showing sympathy.

Often, this is a time when the couple's anxiety and stress are very intense, and they are very attentive and sensitive to every word and gesture. Their first visit to the specialist can evoke many emotions: frustration, anger, stress, and inadequacy. This visit reminds them of past miscarriages, confronts them with their lack of control, clarifies that they should prepare for more miscarriages, and confirms that they have a medical condition that might leave them childless. Physicians are often unaware that the high stress that the couple experiences interferes with their ability to process the information received at the visit. This is a very common experience for many patients undergoing diagnosis: they often cannot recall what the physician said, and tend to misinterpret what has been told to them.

Couples hope to identify a cause for their miscarriages. Understanding the cause, from their point of view, means that a treatment can be offered. It was suggested that women assign a cause to the miscarriage themselves, when one is not assigned by the doctor. 'Self-diagnoses include stress, certain foods, and too much or too little exercise. This may reflect an attempt to regain a sense of control. It is thought that when the cause is detected, there is less self-blame. However, there is still no evidence to support this notion in RPL.(35)

VALUE OF PSYCHOLOGICAL SUPPORT IN PL:

The experience of PL increases levels of distress, depressive symptoms, and anxiety. To lower the emotional burden, couples often withdraw from friends. RPL, can affect almost every aspect of life, and the emotional burden usually

becomes heavier during pregnancy. Obviously, these couples could benefit from psychological support. Although there is no one path that fits the needs of all couples, the following are some options.

- **Support groups:** Support is viewed as most credible coming from someone who has previously experienced and successfully managed a similar crisis. In contrast to many other medical conditions, couples with RPL often do not know similarly afflicted people with whom to openly share their feelings, thoughts, and concerns. Internet support groups usually lump together women with one miscarriage and women with several. Forums for infertility are more focused on fertility treatments than on anxieties of women with previous miscarriages. Meeting other couples with RPL can decrease the sense of loneliness, and reassure couples that their reactions and feelings are normal. Teaching couples about the grieving process. This can help them realize that their reaction to the grief process is normal and is experienced by many other couples. It can also help couples accept their grief, and proceed with it in their own way and pace.
- **Activities for reducing anxiety:** Physical activity, art, meditation, relaxation and, yoga can reduce general anxiety in a non-specific manner.

- **Cognitive restructuring:** The individual interpretation of RPL influences the emotions evoked by this experience. Some of the negative thoughts invoked are automatic and erroneous. Challenging these thoughts and restructuring them into more truthful and positive thinking can improve well-being. Such techniques have been shown to diminish stress, anxiety, depression, and self-blame, and to increase enjoyments in everyday life, in having each other, in work, etc. An example of a common automatic thought in women with RPL may be ‘I’ll never have any children.' This thought is definitely not true, and should be challenged. Some examples may be 'This process is very painful for me, but there is a chance that I will eventually have children.' In addition, the significance attributed to having biological children can be reframed.(37)

- **Improving dialogue with spouse.** Sometimes, spouses fail to recognize what their partners are going through; this may create a cycle of disrupted communication that decreases a couple's enjoyment in doing things together

and increases their marital stress. It is therefore important to encourage couples to have a fruitful dialogue, by learning to listen more to each other, by acknowledging the feelings of each other, by being aware that they may be using different coping strategies, and by recognizing each other's needs.

- **Learning of other parenting options:** Although not all couples feel ready to explore other means to achieve parenthood, many could benefit from meeting couples who have chosen to adopt or use the aid of a surrogate mother. This not only informs them of the procedures and the emotions associated with choosing other paths, but it also confronts them with 'their worst nightmare'. Although they may not decide to follow these paths, couples often realize this is not as bad an option as they have imagined, and some of the fear that is associated with infertility may be relieved.
- **Discussing legitimacy:** Many women with RPL report that they feel it is illegitimate to stop trying to conceive or to choose alternative means for parenthood. Many feel like that they invest a lot of their energy in conceiving and re-conceiving, in hurrying to become parents, but at the same time they need to deal with the pain and grief. They often feel that everyone is expecting them to quickly continue and to try again. They feel that others deny them the legitimacy to say 'I don't want to try again' Raising the option to take a break or to stop conceiving by the medical team may help relieve some of such pressure from some women. Since emotional anxiety tends to peak during pregnancy, therapy should also be targeted to that period. Although many of the above strategies can only be realistically offered between pregnancies, many can help to cope better with emotional difficulties in subsequent pregnancies. Relaxation techniques can be employed whenever a woman recognizes an increase in her stress levels, and cognitive restructuring can help maintain positive thoughts and avoid the loop of negative thoughts.

CONTRIBUTION OF STRESS TO RECURRENT MISCARRIAGE:

A common question that bothers couples is whether excessive stress can adversely affect pregnancy and lead to miscarriage. A belief in such a relationship can increase feelings of guilt and self-blame and further increase stress in a

selfperpetuating circle. Although it is a sensitive matter, this is an important question to study. This question is difficult to examine, since retrospective reports of stress are skewed by the already-experienced outcome, since many women in the general population miscarry due to abnormal chromosomes, and since women at a high risk for miscarriage often experience high levels of stress during pregnancy.

Prospective human studies on the effects of stress on miscarriage or IVF success are rare: some have suggested a causative relation; some have indicated correlations, while others have found no association. With regard to miscarriage, a distinction is not usually made between unexplained miscarriage and miscarriage due to chromosomal abnormalities. One study that attempted to separate the two groups found a correlation between stress levels and miscarriage only in cases thought not to involve chromosomal abnormalities. This, together with the fact that miscarriage is a dichotomous variable, would necessitate a very large sample to detect a correlation.

Studies in laboratory animals have suggested that stress increases the rates of implantation and resorption. Exposing pregnant rats or mice to stress can result in lower pregnancy rates, higher embryonic death, more resorptions , and smaller litters. Adreno-corticotropic hormone (ACTH) treatment for the first 8 days of pregnancy reduced the number of implantation sites in naive/sham operated as well as adrenalectomized mice, suggesting a direct role for this hormone.

Overall, based on animal models and on correlative studies in humans,

there is some evidence that stress can adversely affect fertility in general. However, it is unclear whether this effect can be extended to recurrent miscarriage. Two studies in women with RPL found that depressive symptoms and low satisfaction with social support are predictive of subsequent miscarriage. Another prospective study, though, has failed to find such an association with regard to perceived stress.

The best support for the contribution of psychological factors to RPL comes from studies that have evaluated the effect of psychological support or therapy in women suffering from RPL. Interventions ranged from basic tender loving care' to relaxation workshops and audiocassettes, weekly ultrasound examinations (to assure the woman that the embryo develops appropriately), and other psychological interventions. Remarkably, all four studies reported that women who received psychological support had two- to fourfold lower miscarriage rates than those who did

not. Although these studies suffer from methodological problems, it is doubtful whether these flaws can account for such a marked reduction in miscarriage rates on average from 62% to 23%.

If stress does indeed contributes to miscarriage in women with RPL, it could lead couples into a vicious circle. The first miscarriage could be due to some biological cause such as abnormal karyotype.

During the second pregnancy, these women are more stressed, which boosts the risk of another miscarriage. If another miscarriage occurs, this increases their stress, and their chances of another miscarriage.(7,52,55)

PSYCHO-NEURO-IMMUNOLOGY

There are several potential neuro-endocrinological pathways through which stress might promote miscarriage. However, an interesting pathway that has captured the attention of several investigators is the psycho-neuro-immunologic (PNI) path. Over the past 30 years, it has become clear that the immune system is not autonomous but has bidirectional connections with the central nervous system. It has been shown that the immune responses can be behaviourally conditioned, that various emotional and cognitive states can influence both cellular and humoral immunity, and that cytokines can affect neural function.(56,57,58)

The effects of psychological stress on various immune measures have been extensively studied. In most cases, stress interferes with the normal function of the immune system rather than assisting it. It has also been demonstrated that this perturbation can result in actual consequences to health, for example lowering resistance to infections and slowing wound healing. This is especially the case with chronic and severe stress.

Interestingly, the subset of immune cells that seem to be most affected by stress are natural killer (NK) cells, the cells thought to be involved in the aetiology of RPL. NK cells seem to carry the greatest density of adrenergic receptors, and are thus more susceptible to the influence of the sympathetic nervous system. These receptors contribute to direct suppression of NK-cell activity, detachment from endothelial cells, and redistribution after exposure to stress. The number and activity of circulating NK cells were reported to be highly affected by stressors such as academic examination, exposure to disastrous hurricanes, interpersonal stress, first parachuting jumps, and marital disputes.(62).

From the PNI perspective, stress might be promoting miscarriage by interfering with the uterine immunological conditions that protect pregnancy. In several experiments in mice, Arck et al have shown that stress around the fifth day of pregnancy more than tripled the resorption rates in miscarriage-prone mice; depletion of NK cells prevented this effect. Studying women, we have recently shown that the number and activity of peripheral NK cells in RPL, which have previously been shown to predict the outcome of subsequent pregnancy, is a transient response to the

blood withdrawal. A cannula was inserted into the veins of women with RPL and controls, and blood was drawn immediately and 20 minutes later. NK-cell activity and cell number were increased in RPL patients in the first blood withdrawal, but declined to a level similar to that of the control in the second blood withdrawal. These levels remained almost unchanged in the control groups. This may suggest that the increased NK-cell activity and numbers often observed in women with RPL reflect hypersensitivity to the stress of blood withdrawal rather than the immunological steady state. It remains to be determined whether such hypersensitivity is also predictive of pregnancy outcome.(63)

The loss of a pregnancy no matter how early or how late can cause feelings of grief. For many women, it takes longer for their emotions to heal than for their bodies to heal.

Feelings of grief may differ from those of the partner. The lady may express her feelings in different ways. Reach out to those closest to that person and ask for their comfort and support. They should talk to the concerned doctor. There may be support groups in that area that are eager to help. Counselling can help both to cope .Future pregnancies should be planned, diagnosed early, and checked closely. This will improve chances of having a successful pregnancy in the future by doing certain things such as:

- A complete medical workup before getting pregnant again.
- If there is pregnancy, ascertain it by medical and gynaecological examinations.
- Medical and expert instructions should be followed rigorously.

Maintain a healthy lifestyle by eating healthy foods, exercising, and avoiding alcohol, tobacco, and illegal drugs. More than any other fertility problem, RPL submits patients to repeated cycles of hope and despair. Although management of physician's emotions is not considered part of the physician's role, one might believe that adopting an inclusive psychosocial perspective would greatly improve the treatment of couples with RPL. The anxiety, depression, anger, and frustration these couples experience are critically influenced by how significant they regard their miscarriages, by how their family, friends, and society perceive these miscarriages, and by how much emotional support they receive. A supportive and empathic approach by the medical team can ease this suffering, and psychological interventions

can be used to improve couples' coping and enhance their well-being. Such interventions may not only relieve the emotional burden of RPL but also lower the risk of another miscarriage. Although some clinicians may dismiss such effects, the evidence for such a possibility exceeds the support for several medical interventions already employed in RPL. Larger randomized studies should examine this possibility more carefully. Until proven, the psychosocial hypothesis should be raised with caution, as it can lead women to blame themselves for the miscarriage. (64)

AFTER A MISCARRIAGE CARE AND MENTALTRAUMA:

Simple word like "sad" cannot describe the feelings that follows pregnancy loss. "Devastated" is little closer to the truth, and "feeling like soul has run over by a steam roller or put through a paper shredder" can be more close description. Suffice it to say, it's normal to feel bad after a miscarriage or stillbirth.

After pregnancy loss Symptoms of depression ensue. This might be feelings of sadness and emptiness, hopelessness, loss of interest in activities once enjoyed, trouble concentrating, appetite changes and other such symptoms. The symptoms of depression are as follows:

1. Persistent feelings of sadness, emptiness, hopelessness, guilt, or helplessness
2. Irritability or restlessness
3. Loss of interest in formerly enjoyable activities
4. Fatigue and low energy
5. Problems in concentrating and making decisions
6. Sleep disturbances
7. Appetite changes
8. Thoughts of suicide
9. Persistent pains or digestive problems that do not respond to treatment

All women are not diagnosed as cases of ‘clinical depression, but most of them suffer from depression of some degree. The normal grief response can be nearly identical to depression. It is impossible to draw a general line between what is grief and what is depression. The Guidelines for to differentiate grief from depression are suggested. One factor is the length of time that the symptoms last, but there isn't a

time limit for what is and isn't normal for grief. There is no set point to have coped with your miscarriage grief, and for many people it tends to be a lifelong process. Grieving for a long time doesn't necessarily mean you need an evaluation for depression. Perhaps the best indicator is how your grief and sadness are affecting your daily life. Being in the company of family, friends, and relatives can reduce the severity of mental trauma due to pregnancy loss. Some women do have increased risk for developing clinical depression after a miscarriage. Although the woman physically recovers from a miscarriage quickly, psychological recovery for parents in general can take a long time. People differ greatly in this regard: some are able to move on after a few months, but others take more than a year. For many patients who go through a process of grief, it is often as if a baby had been born but died. How short a time the fetus lived in the womb may not matter for the feeling of loss. When the pregnancy turns out not to be viable, dreams, fantasies and plans for the future are roughly disturbed.

Besides the feeling of loss, a lack of understanding by others is often important. People who have not experienced a miscarriage themselves may find it hard to empathize with what has occurred and how upsetting it may be. This may lead to unrealistic expectations of the parents' recovery. The pregnancy and miscarriage are hardly mentioned any more in conversation, often because the subject is too painful. This can make the woman feel particularly isolated. Inappropriate or insensitive responses from the medical profession can add to the distress and trauma experienced, so in some cases attempts have been made to draw up a standard code of practice. Grief is not the only emotion associated with miscarriages.

Other typical emotions reported by woman who have lost a pregnancy include depression, loneliness and isolation. Another common emotional response to a spontaneous abortion is self-blame. Many women often feel that if only they had done something differently, they wouldn’t have miscarried. Miscarriage can also cause a woman to feel intense anger and jealousy towards other women, even friends, who are pregnant. While these emotions can be appalling, they will eventually pass and fade. Miscarriages can make men nervous to talk to their partners. Not only are they upset about the loss, but also they are grieving for their partner. After a miscarriage, a couple’s relationship can become noticeably strained. Dealing with

such a significant loss can cause individuals to turn inwards and away from each other.

Discussing the feelings after a miscarriage is often difficult for couples, but it is necessary. If one finds that there is too much stress on your relationship right now, seeking out couples counselling can help you work through your grief as well as improve the communication between husband and wife.

Often when miscarriage occurs early in pregnancy, tissue is left in the uterus. If there is concern about heavy bleeding or infection, this tissue will be removed. The tissue can be part of the foetus, part of the placenta or both.

The tissue that remains may be removed by dilation and curettage (D&C). With this method, the cervix may be widened if needed. The tissue is then removed gently from the lining of the uterus. It does not require a hospital stay. Medications can be used to help pass the tissue that remains in the uterus. One can expect spotting and some discomfort for a few days. If the patient has any of the following symptoms then hospitalization is needed.

- Heavy bleeding
- Fever
- Chills
- Severe pain

The recovery will take some time. If the pregnancy is beyond 13 weeks the patient still looks pregnant and the breasts may leak milk. Light exercise is advised, but is advised to increase the activity slowly. Consulting the doctor about which exercises are best and how often to do them. It is safe to have sex after the bleeding stops.

A lady can ovulate and become pregnant as soon as 2 weeks after an early miscarriage. If the patient does not wish to become pregnant again use birth control by any suitable method according to the advise of the physician.

If the blood is Rh negative, you should ask for a blood product called Rh immune globulin. This prevents developing antibodies that can affect a future Rh-positive baby. If the patient has a number of miscarriages in a row, order tests to look for probable causes.

When women with RPL conceive again, they exhibit high levels of anxiety, having difficulty getting through each day. This anxiety is manifested as general tension, despondence and premonitions of miscarriage, and may be exhibited by weeping, fear of detecting bleeding when going to toilet or examining underwear, extreme anxiety over any abdominal pain, checking continuously for signs of pregnancy, avoidance of other pregnant women, and reluctance to discuss the pregnancy with anyone, including their husband.

COPING WITH THE LOSS :

For many women, emotional healing takes a good deal longer than physical healing. The feelings of loss can be intense. Even if the pregnancy ended very early, the sense of bonding between a woman and her foetus can be strong.

Grief can involve a wide range of feelings. Everybody connected with pregnancy start searching for the reason of pregnancy loss. Many patients wrongly blame themselves. They may have headaches, lose your appetite, feel tired, or have trouble concentrating or sleeping.

Feelings of grief may differ from those of the partner. Your partner may grieve, but he may not express his feelings in the same way you do. Husband may feel he has to be strong for both of you and may not share his hurt and disappointment with you. Tension is created between the two when they need each other the most.

In most cases it is not likely that it could have been prevented. Losing a pregnancy often doesn't mean that a woman can't have more children or that there is something wrong with her health. Most women who miscarry can have a healthy pregnancy later.

Emotional healing is as vital as physical healing. Grieving allows accepting this painful loss and going on with life. Counselling can help both if one can't deal with these feelings alone. It is good to allow enough time for physical and emotional healing before trying to get pregnant again. For that guidance from the gynaecologist is very much important.

SYMPTOMS OF PREGNANCY LOSS:

Bleeding is the most common sign of miscarriage. Most women who have vaginal spotting or bleeding during the early months of pregnancy have healthy babies. Some of these women, though, will have a miscarriage. This is why bleeding during early pregnancy is called threatened miscarriage.

Sometimes mild cramping of the lower abdomen or a low backache may occur along with bleeding. Bleeding may persist, become heavy, or occur along with a pain like menstrual cramps or the breaking of the amniotic sac.

A pelvic exam to see if the cervix has dilated (opened) should be conducted immediately. If the cervix has dilated and foetal tissue is lost, a miscarriage is certain.

Other causes of stillbirth include trauma (such as car accidents), postdate pregnancy (a pregnancy that lasts longer than 42 weeks), Rh disease (an incompatibility between the blood of mother and baby), and lack of oxygen (asphyxia) during a difficult delivery. These causes are uncommon.

Certain risk factors also are associated with stillbirth. Some of these include:

- Maternal age over 35
- Maternal obesity
- Multiple gestation (twins or more)
- African-American ancestry

Signs of a miscarriage include:

- Vaginal spotting or bleeding
- Cramping or abdominal pain
- Fluid or tissue passing from the vagina

TESTS: HCG (Human Chorionic Gonadotrophin):

- **Qualitative HCG testing**

  is routinely used to confirm pregnancy. Quantitative HCG testing (also frequently called beta HCG), measures the actual amount of HCG present in the blood. It may be ordered to help diagnose an ectopic pregnancy, to help diagnose and monitor a pregnancy that may be failing, and or to monitor a woman after a miscarriage. In addition, a quantitative HCG test may be ordered to diagnose trophoblastic disease or germ cell tumours of the testes or ovary. It may be ordered at regular intervals to monitor the effectiveness of treatment for these conditions and to detect tumor recurrence.

- **A qualitative urine or blood HCG test**

is ordered as early as 10 days after a missed menstrual period if a woman wishes to confirm whether or not she is pregnant (some methods can detect HCG even earlier, at one week after conception). In certain patients, several quantitative blood HCG tests over several days may be ordered to rule out an ectopic pregnancy or to monitor a woman after a miscarriage. A doctor will also order a quantitative HCG test when she suspects trophoblastic disease or the presence of germ cell tumours.

In non-pregnant women, HCG levels are normally undetectable. During early pregnancy, the HCG level in the blood doubles every two to three days. Ectopic pregnancies usually have a longer doubling time. Those with failing pregnancies will also frequently have a longer doubling time or may even show falling HCG concentrations. hCG concentrations will drop rapidly following a miscarriage. If HCG does not fall to undetectable levels, it may indicate remaining HCG-producing tissue that will need to be removed.

HCG is also used to monitor treatment in patients with trophoblastic disease and to detect recurrent disease after treatment is complete. During therapy, a falling HCG level generally indicates that the cancer is responding to treatment, while rising levels may indicate that the cancer is not responding to therapy. Increased HCG levels after treatment may indicate a recurrence of disease.

Tests performed too early in the pregnancy, before there is a significant HCG level, may give false-negative results, while blood or protein in the urine may cause false-positive results. Urine HCG tests may give a false negative result in very dilute urine. Patients should not drink large amounts of fluid before collecting a urine sample for a pregnancy test.

Certain drugs such as diuretics and promethazine (an antihistamine) may also cause false-negative urine results. Other drugs such as anti-convulsants, anti-Parkinson drugs, hypnotics, and tranquilizers may cause false-positive results.

There are reports of false positive serum HCG results due to several different compounds (not drugs) that may interfere with the test. These include certain types of antibodies that may be present in some individuals and fragments of the HCG molecule. Generally, if results are questionable, they may be confirmed by testing with a different method.

Since progesterone levels vary predictably throughout the menstrual cycle, multiple (serial) measurements can be used to help recognize and manage some causes of infertility. Progesterone can be measured to determine whether or not a woman has ovulated, to determine when ovulation occurred, and to monitor the success of induced ovulation.

In early pregnancy, progesterone measurements may be used, along with human chorionic gonadotropin (HCG) testing, to help diagnose an ectopic or failing pregnancy (progesterone levels will be lower than expected), although this will not differentiate between the two conditions. Progesterone levels also may be measured throughout a high-risk pregnancy to help evaluate placenta and foetal health.

Progesterone levels may be monitored in women who have trouble maintaining a pregnancy, as low levels of the hormone can lead to miscarriage. If a woman is receiving progesterone injections to help support her early pregnancy, her progesterone levels may be monitored on a regular basis to help determine the effectiveness of that treatment.

In women who are not pregnant, progesterone levels may be used, along with other tests, to help determine the cause of abnormal uterine bleeding.

INTERPRETATION OF THE TEST RESULT:

Interpretation of progesterone test results requires knowledge of where a woman is in her menstrual cycle or pregnancy. Progesterone levels usually start to elevate when an egg is released from the ovary, rise for several days, and then either continue to rise with early pregnancy or fall to initiate menstruation.

If progesterone levels do not rise and fall on a monthly basis, a woman may not be ovulating or having menstrual periods. If levels do not rise normally during an early pregnancy, the pregnancy may be ectopic and/or may be failing. If serial measurements do not show increasing progesterone levels over time, there may be problems with the viability of the placenta and foetus.

Levels of progesterone will be naturally higher during pregnancies that involve multiples (twins, triplets, etc.) than those in which there is only one foetus.

Increased progesterone levels also are seen occasionally with luteal ovarian cysts, molar pregnancies, and with a rare form of ovarian cancer.

Increased levels are occasionally due to an overproduction of progesterone by the adrenal glands. In late pregnancy, low levels of progesterone may be associated with toxaemia.

RESEARCH ON MISCARRIAGE:

Miscarriage is the term health care providers use to describe the loss of pregnancy from natural causes before the 20th week of pregnancy. Most miscarriages occur very early in pregnancy, in some cases before a woman even knows she is pregnant. Researchers estimate that, among women who already know they are pregnant; nearly 15 percent will have a miscarriage.

Pregnancy loss can be devastating to a woman and her family. A woman or family who is having trouble coping with the loss of a miscarriage should receive medical counsellig.

1. ROLE OF HORMONE SUPPORT IN PREGNANCY LOSS:

In the UK, three progestogenic products are licensed for use in early pregnancy: intramuscular progesterone, vaginal progesterone, and oral dydrogesterone, and have been authorized for between 10 and 20 years. However, the number of studies examining the efficacy of progesterone supplementation in early pregnancy remains small, and they do not fulfil in the criteria required for meaningful results. In addition, the diversity of biological and pharmacological properties does not allow extrapolation of results across studies. Although there are no obvious adverse effects to mother or foetus, a low level of risk may as yet be unidentified.

The observed frequency of another miscarriage after three is over 50% and the wish to prescribe an apparently and well tolerated treatment is appealing, especially in light of the emerging scientific understanding of early pregnancy failure. As yet, however, the evidence for ‘tender loving care’ shows a similar improvement in outcomes. The need ‘to do something’ for a group of unfortunate patients often sems to over-ride the use of an evidence base. While treatment does not appear to do harm, the evidence for the use of progesterone supplementation in recurrent pregnancy loss is contentious at best, dated, and poor at worst.

Progesterone levels are measured:

- As part of an infertility assessment, when a woman is having trouble getting pregnant and the doctor wants to verify that she is ovulating normally
- To determine if ovulation has occurred and when following drug therapy to induce ovulation
- When symptoms, such as abdominal pain and spotting, suggest an ectopic pregnancy or threatened miscarriage
- To monitor the effectiveness of treatment when a pregnant woman requires progesterone injections to help maintain her pregnancy
- To monitor placenta and fetal health during a high-risk pregnancy
- When a non-pregnant woman is experiencing abnormal uterine bleeding

2. NICHD Research on Miscarriage:

The National Institute of Child Health & Human Development (NICHD) supports and conducts research on the causes of miscarriage in hopes of finding ways to prevent women from having them. For instance, NICHD-supported researchers recently found that women with a disorder called Polycystic Ovary Syndrome (PCOS) are three times more likely to miscarry during the early months of pregnancy than women who don't have PCOS. Women with PCOS often have great difficulty getting pregnant naturally.

Research has found that women with PCOS also tend to have a condition called insulin resistance, which means their bodies have trouble using the insulin they make to get energy from their cells. Insulin resistance often occurs before someone develops diabetes. To treat this insulin resistance, researchers had been prescribing a drug called metformin. What they found was that metformin not only reduced insulin resistance, but it also brought about changes to the uterine lining that could help women with PCOS get pregnant and reduce the risk of miscarriage during their first trimester (the first three months) of pregnancy.

Studies are now underway to confirm the positive effects of the using metformin in women with PCOS, and to evaluate the safety of taking the drug throughout pregnancy. The NICHD's Reproductive Sciences Branch, through its

Reproductive Medicine Network (RMN) is currently conducting a clinical trial for the treatment of infertility related to PCOS, using metformin. The RMN Web site provides more information on this trial and on the RNM itself.

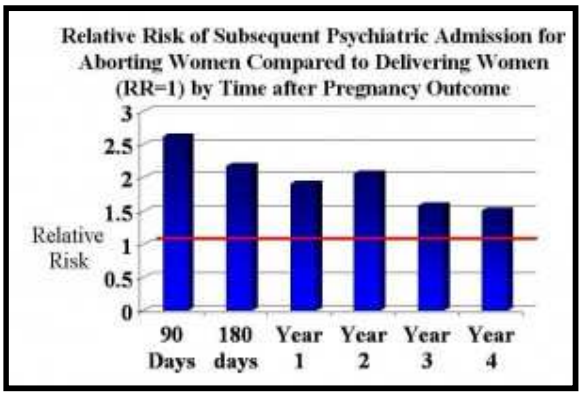
Other NICHD-supported research is trying to learn more about repeated miscarriage. Researchers estimate that between 1 percent and 2 percent of women in the United States has more than one miscarriage without a known cause. Women who experience repeated miscarriages may undergo expensive and lengthy tests to try to identify a cause, but often get no answers. NICHD researchers, examining the vulva of these women, have found that many of them share a genetic mutation, or change. This mutation, on one of the X chromosomes, was found in nearly 15 percent of women who had a history of repeated, unexplained miscarriage. If this genetic mutation is confirmed as a cause of repeated miscarriages, researchers may be able to develop a simple blood test that could predict a woman's chances of having a miscarriage in future pregnancies.

For more information on NICHD-supported research on miscarriage, read the Institute's news releases on miscarriage. The National Library of Medicine provides additional information on pregnancy loss, which includes miscarriage

3. ABORTION RISKS: A LIST OF MAJOR PSYCHOLOGICAL COMPLICATIONS RELATED TO ABORTION

REQUIREMENT OF PSYCHOLOGICAL TREATMENT:

A study of the medical records of 56,741 California Medicaid patients revealed that women who had abortions were 160 percent more likely than delivering women to be hospitalized for psychiatric treatment in the first 90 days following abortion or delivery. Rates of psychiatric treatment remained significantly higher for at least four years.[1,3]



Rate of hospitalization after abortion compared to childbirth=1.0

In a study of post-abortion patients only 8 weeks after their abortion, researchers found that 44% complained of nervous disorders, 36% had experienced sleep disturbances, 31% had regrets about their decision, and 11% had been prescribed psychotropic medicine by their family doctor. (2) A 5 year retrospective study in two Canadian provinces found significantly greater use of medical and psychiatric services among aborted women. Most significant was the finding that 25% of aborted women made visits to psychiatrists as compared to 3% of the control group. (3) Women who have had abortions are significantly more likely than others to subsequently require admission to a psychiatric hospital. At especially high risk are teenagers, separated or divorced women, and women with a history of more than one abortion. (4)

Since many post-aborted women use repression as a coping mechanism, there may be a long period of denial before a woman seeks psychiatric care. These repressed feelings may cause psychosomatic illnesses and psychiatric or behavioral in other areas of her life. As a result, some counselors report that unacknowledged post-abortion distress is the causative factor in many of their female patients, even though their patients have come to them seeking therapy for seemingly unrelated problems. (5)

4. POST-TRAUMATIC STRESS DISORDER (PTSD or PAS):

While psychological reactions to abortion fall into many categories, some women experience all or some of they symptoms of post-traumatic stress disorder (PTSD). The lowest incidence rate of PTSD reported following abortion is 1.5%, which would translate to over 600,000 cases of abortion induced PTSD.[2] Another study found that 14% of American women have all the symptoms of PTSD and attribute them to their abortions, with as many as 65% reporting some, but not all symptoms of PTSD.[3]

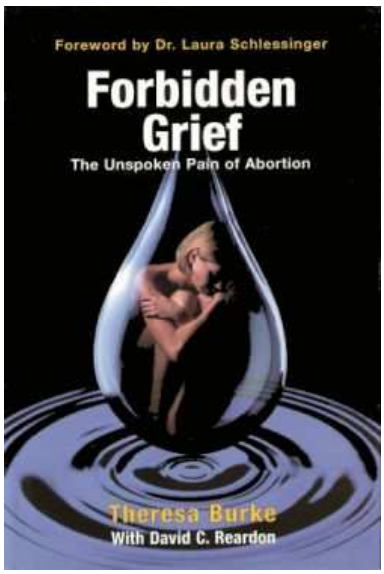
Yet another random study found that a minimum of 19% of post-abortion women suffer from diagnosable post-traumatic stress disorder (PTSD). Approximately half had many, but not all, symptoms of PTSD, and 20 to 40 percent showed moderate to high levels of stress and avoidance behaviour relative to their abortion experiences. (6)

PTSD is a psychological dysfunction which results from a traumatic experience which overwhelms a person's normal defence mechanisms resulting in intense fear, feelings of helplessness or being trapped, or loss of control. The risk that an experience will be traumatic is increased when the traumatizing event is perceived as including threats of physical injury, sexual violation, or the witnessing of or participation in a violent death. PTSD results when the traumatic event causes the hyper arousal of "flight or fight" defence mechanisms. This hyper arousal causes these defence mechanisms to become disorganized, disconnected from present circumstances, and take on a life of their own resulting in abnormal behaviour and major personality disorders. As an example of this disconnection of mental functions, some PTSD victim may experience intense emotion but without clear memory of the event; others may remember every detail but without emotion; still others may reexperience both the event and the emotions in intrusive and overwhelming flashback experiences. (7)

Women may experience abortion as a traumatic event for several reasons. Many are forced into an unwanted abortions by husbands, boyfriends, parents, or others. If the woman has repeatedly been a victim of domineering abuse, such an unwanted abortion may be perceived as the ultimate violation in a life characterized by abuse. Other women, no matter how compelling the reasons they have for seeking an abortion, may still perceive the termination of their pregnancy as the violent killing of their own child. The fear, anxiety, pain, and guilt associated with the procedure are mixed into this perception of grotesque and violent death. Still other women, report that the pain of abortion, inflicted upon them by a masked stranger invading their body, feels identical to rape. (8) Indeed, researchers have found that women with a history of sexual assault may experience greater distress during and after an abortion exactly because of these associations between the two experiences. (9) When the stressor leading to PTSD is abortion, some clinicians refer to this as Post-Abortion Syndrome (PAS).

The major symptoms of PTSD are generally classified under three categories: hyper arousal, intrusion, and constriction.

Intrusion is the reexperience of the traumatic event at unwanted and unexpected times. Symptoms of intrusion in PAS cases include: recurrent and intrusive thoughts about the abortion or aborted child, flashbacks in which the woman momentarily reexperiences an aspect of the abortion experience, nightmares about the abortion or child, or anniversary reactions of intense grief or depression on the due date of the aborted pregnancy or the anniversary date of the abortion.



Constriction is the numbing of emotional resources, or the development of behavioural patterns, so as to avoid stimuli associated with the trauma. It is avoidance behaviour; an attempt to deny and avoid negative feelings or people, places, or things which aggravate the negative feelings associated with the trauma.

In post-abortion trauma cases, constriction may include: an inability to recall the abortion experience or important parts of it; efforts to avoid activities or situations which may arouse recollections of the abortion; withdrawal from relationships, especially estrangement from those involved in the abortion decision; avoidance of children; efforts to avoid or deny thoughts or feelings about the abortion; restricted range of loving or tender feelings; a sense of a foreshortened future (e.g., does not expect a career, marriage, or children, or a long life.); diminished interest in

previously enjoyed activities; drug or alcohol abuse; suicidal thoughts or acts; and other self-destructive tendencies.

As previously mentioned, Barnard's study identified a 19% rate of PTSD among women who had abortions three to five years previously. But in reality the actual rate is probably higher. Like most post-abortion studies, Barnard's study was handicapped by a fifty percent drop out rate. Clinical experience has demonstrated that the women least likely to cooperate in post-abortion research are those for whom the abortion caused the most psychological distress. Research has confirmed this insight, demonstrating that the women who refuse follow up evaluation most closely match the demographic characteristics of the women who suffer the most post-abortion distress. (10) The extraordinary high rate of refusal to participate in post-abortion studies may interpreted as evidence of constriction or avoidance behaviour (not wanting to think about the abortion) which is a major symptom of PTSD.

For many women, the onset or accurate identification of PTSD symptoms may be delayed for several years. (11) Until a PTSD sufferer has received counselling and achieved adequate recovery, PTSD may result in a psychological disability which would prevent an injured abortion patient from bringing action within the normal statutory period. This disability may, therefore, provide grounds for an extended statutory period.

5. SEXUAL DYSFUNCTION:

Thirty to fifty percent of aborted women report experiencing sexual dysfunctions, of both short and long duration, beginning immediately after their abortions. These problems may include one or more of the following: loss of pleasure from intercourse, increased pain, an aversion to sex and/or males in general, or the development of a promiscuous life-style. (12)

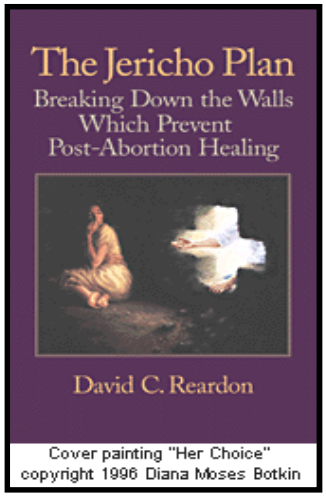
6. SUICIDAL IDEATION AND SUICIDE ATTEMPTS:

Approximately 60 percent of women who experience post-abortion sequelae report suicidal ideation, with 28 percent actually attempting suicide, of which half attempted suicide two or more times. Researchers in Finland have identified a strong statistical association between abortion and suicide in a records

based study. The identified 73 suicides associated within one year to a pregnancy ending either naturally or by induced abortion. The mean annual suicide rate for all women was 11.3 per 100,000. Suicide rate associated with birth was significantly lower (5.9). Rates for pregnancy loss were significantly higher. For miscarriage the rate was 18.1 per 100,000 and for abortion 34.7 per 100,000. The suicide rate within one year after an abortion was three times higher than for all women, seven times higher than for women carrying to term, and nearly twice as high as for women who suffered a miscarriage. Suicide attempts appear to be especially prevalent among post-abortion teenagers.(13)

7. INCREASED SMOKING WITH CORRESPONDENT NEGATIVE HEALTH EFFECTS:

Post-abortion stress is linked with increased cigarette smoking. Women who abort are twice as likely to become heavy smokers and suffer the corresponding health risks. (14) Post-abortion women are also more likely to continue smoking during subsequent wanted pregnancies with increased risk of neonatal death or congenital anomalies. (15)



8. **ALCOHOL AND DRUG ABUSE:**

Over twenty studies have linked abortion to increased rates of drug and alcohol use.[1] Abortion is significantly linked with a two fold increased risk of alcohol abuse among women.(16) Abortion followed by alcohol abuse is linked to violent behaviour, divorce or separation, auto accidents, and job loss.(17) In addition to the psycho-social costs of such abuse, drug abuse is linked with increased exposure to HIV/AIDS infections, congenital malformations, and assaultive behaviour. (18)

9. **EATING DISORDERS:**

For at least some women, post-abortion stress is associated with eating disorders such as binge eating, bulimia, and anorexia nervosa. (19)

10. **CHILD NEGLECT OR ABUSE:**

Abortion is linked with increased depression, violent behavior, alcohol and drug abuse, replacement pregnancies, and reduced maternal bonding with children born subsequently. These factors are closely associated with child abuse and would appear to confirm individual clinical assessments linking post-abortion trauma with subsequent child abuse. (20)

11. **DIVORCE AND CHRONIC RELATIONSHIP PROBLEMS:**

For most couples, an abortion causes unforeseen problems in their relationship. Post-abortion couples are more likely to divorce or separate. Many post-abortion women develop a greater difficulty forming lasting bonds with a male partner. This may be due to abortion related reactions such as lowered self-esteem, greater distrust of males, sexual dysfunction, substance abuse, and increased levels of depression, anxiety, and volatile anger. Women who have more than one abortion (representing about 45% of all abortions) are more likely to require public assistance, in part because they are also more likely to become single parents. (21)

12. **REPEAT ABORTIONS:**

Women who have one abortion are at increased risk of having additional abortions in the future. Women with a prior abortion experience are four times more likely to abort a current pregnancy than those with no prior abortion history. (22)This increased risk is associated with the prior abortion due to lowered self esteem, a conscious or unconscious desire for a replacement pregnancy, and increased sexual activity post-abortion. Subsequent abortions may occur because of conflicted desires to become pregnant and have a child and continued pressures to abort, such as abandonment by the new male partner.

Aspects of self-punishment through repeated abortions are also reported. (23) Approximately 45% of all abortions are now repeat abortions. The risk of falling into a repeat abortion pattern should be discussed with a patient considering her first abortion. Furthermore, since women who have more than one abortion are at a significantly increased risk of suffering physical and psychological sequel, these heightened risks should be thoroughly discussed with women seeking abortions.

13. GENDER COMPARISON OF PSYCHOLOGICAL REACTION AFTER MISCARRIAGE—A 1-YEAR LONGITUDINAL STUDY

- Article first published online: 8 JUL 2010
- Kong G, Chung T, Lai B, Lok I. Gender comparison of psychological reaction after miscarriage—a 1-year longitudinal study. BJOG 2010;117:1211–1219.
- **Objective -** To explore men's psychological reaction and its evolutionary course over 1 year after miscarriage, to compare this reaction with that of their female partners and to investigate the possible correlation of psychological states between partners.
- **Design-** Prospective 1-year longitudinal observational study.
- **Setting-** A university-affiliated tertiary referral hospital in Hong Kong.
- **Sample** -Eighty-three miscarrying couples.

- **Methods-** The psychological reactions of miscarrying women and their male partners were assessed immediately and at 3, 6 and 12 months after miscarriage.
- Main outcome measures Psychological outcomes were assessed using the 12-item General Health Questionnaire (GHQ-12) and Beck Depression Inventory (BDI).
- **Results-** A substantial proportion of men (43.4%) scored high in GHQ-12 and 16.9% scored high in BDI immediately after miscarriage. In men, both psychometric scores decreased sharply within the first 3 months and reached a plateau. When compared with women, men scored significantly lower in GHQ-12 and BDI during the 1-year course after miscarriage. A planned pregnancy was a significant risk factor ($P = 0.008$) associated with an initial high BDI score in men. There was a significant positive correlation between couples in both GHQ-12 and BDI scores throughout the longitudinal course.
- **Conclusions** Although the psychological impact of miscarriage on men was less enduring when compared with that on women, a significant proportion of men demonstrated psychological distress after miscarriage. The significant positive correlation in a couple's psychological reaction indicated that psychological morbidity was not confined only to a woman's own experience, but also affected her relationship with her male partner.

MODERN ANTENATAL CARE

This section covers a range of important issues related to antenatal care. Another report that there is no added benefit of multiple-micronutrient supplementation during pregnancy compared with supplementation with iron and folic acid alone. Among the reviews on miscarriage, one states that use of progestogens in early-to-mid pregnancy does not prevent a threatened miscarriage.

General antenatal care

-Patterns of routine antenatal care for low-risk pregnancy

-Pelvic floor muscle training for prevention and treatment of urinary and faecal incontinence in antenatal and postnatal women

-Routine symphysis-fundal height measurement during pregnancy

-Support during pregnancy for women at increased risk of low-birth-weight babies

-Traditional birth attendant training for improving health behaviours and pregnancy outcomes.

Nutrition during pregnancy

- Calcium supplementation during pregnancy for preventing hypertensive disorders and related problems.
- Effects of routine oral iron supplementation with or without folic acid for women during pregnancy.
- Energy and protein intake in pregnancy.
- Multiple-micronutrient supplementation for women during pregnancy.
- Periconceptional supplementation with folate and/or multivitamins for preventing neural tube defects.
- Vitamin A supplementation during pregnancy.

Miscarriage

- Antibiotics for incomplete abortion
- Expectant care versus surgical treatment for miscarriage
- Medical treatment for early foetal death (less than 24 weeks)
- Prevention of recurrent miscarriage for women with antiphospholipid antibody or lupus anticoagulant
- Progestogen for preventing miscarriage
- Surgical procedures to evacuate incomplete miscarriage

MATERIALS AND METHODS

➢ Materials-

- **Selection of the patients** : Control Group(modern medicine) and Drug Group(sushrutokta regimen),each of 100 patients were selected and meditation group(sushrutokta regimen + ashta mangal dhyan)30 cases were selected on the following criteria-

Inclusion criteria:

1. History of previous pregnancy loss.
2. Any or all the signs of early threatened abortion.
3. Patients residing within the radius of 5 Km.

The main aim of the study is to save the pregnancy and prevent the pregnancy loss. So the patients with the history of pregnancy loss and also with the signs of threatened abortion were selected. Delicate care and management is needed so the patients residing within the radius of 5 km. were selected.

Exclusion criteria:

1. Known cases of Diabetes, Hypertension,
2. Patients with Immunocompramised, H/o Torch +ve, Hepatitis B, Unicornuate Bicornuate, septate uterus, uterine deformity.

- Patients having the history of diabetes and hypertension are high risk patients so they are not included.

- Immuno-compramised need Institute management any time as they are prone have infections. So they are excluded.
- Uterine deformity cases need special management so they are also excluded.

Drop out criteria:

1. Irregularity
2. Disobedience
3. Unco-operative
4. Patients remaining absent for any reason.

Antenatal care when done in a special way needs a continuous follow up. We want to get the result as it deals with saving a life. So regularity very much needed. Disobedient and un- cooperative patients are hard to manage so they dropped out.

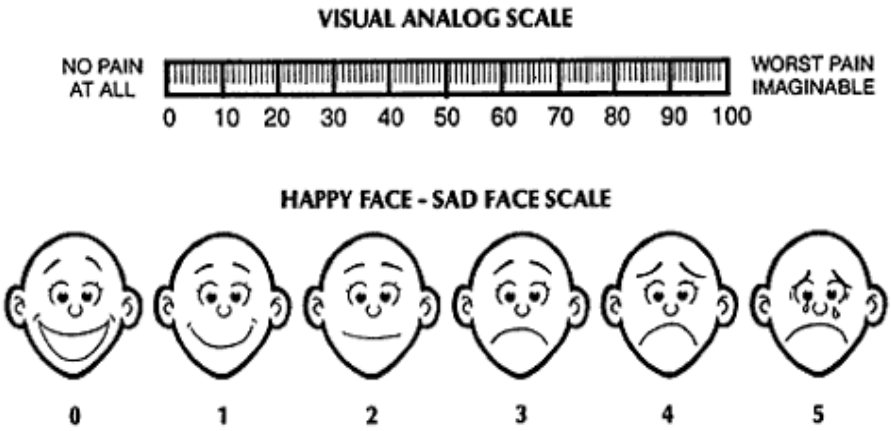
Assessment Criteria:

Criteria for Upashaya: Gradation of the observed results will be made on the basis of symptomatic relief and sonography reports. Distribution of patient according to Lakshnatmak upashaya (symptomatic relief)-each symptom will be graded as improved, partially improved, not improved.

Objective parameters:

A.Backpain:-

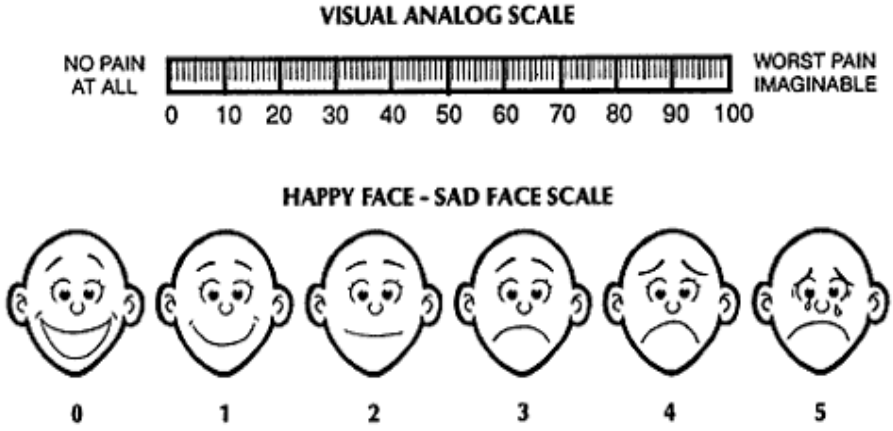
Scale used was **HAPPY FACE SCALE**.



Improved partially improved not improved

B.Colicy pain:

Scale used was **HAPPY FACE SCALE**



Improved partially improved not improved

C. Spotting:

improved	No stains on the under-garment
Partially improved	Only spotting while urinating
Not improved	With soakage of pads

D. Loss of confidence

improved	Confident about the management
Partially improved	Feeling of insecurity 4-5 times a wk
Not improved	Always insecured about the loss

E.Threat

improved	Feeling of having healthy fetus
Partially improved	Fear for day to day activity
Not improved	Always feeling of pregnancy loss

➢ Dravya Guna Vidnyan

"Sushrutokta Regimen" was the combination of masanumas tabs for clinical trial. The original 'Masanumas Kwath' described in monthly antenatal care. Instead of kwath, vati was used for the following reasons:

a) **Easy preparation:** Kashaya has to be made fresh, twice a day. It becomes a tedious job. Instead Vati can be made once and used with warm milk daily which makes it easy for use.

b) **Durability:** To prepare Kashaya daily and fresh twice a day is time consuming. If it is prepared once only and in sufficient quantity for two doses and kept for few hours, there are chances of fermentation where the qualities are changed. As against the Vati is prepared once only by taking the powders of the herbal ingredients and adding proper binders in proper ratio and making the tablets out of it. These tablets are administered along with warm water twice a day. So it saves the time and efforts of the patient and at the same time it increases the shelf life of the drug.

c) **Palatability:** The tablets are easy to consume as compared to Kashaya. A patient who can't tolerate the bitter taste of Kashaya shows some type of hatrate towards the medicine as it has to be taken for a longer period of time. In pregnancy naturally the mother is very choosy towards the taste. Instead Vati is easily palatable, patient can take it for a longer period.

d) **Cost effectiveness:** Cost of preparation of Vati is much less than the cost of Kashaya. So indirectly it saves the medical expenses of the patient making it affordable for a longer duration. It is also easy to carry Vati anywhere as compared to Kashaya.

Considering all the above factors, in today's fast life, the drug which suits the patient's habits, occupation, taste etc, Vati was found to be most useful.

1st Month -

- Yashtimadhu Extract - 60 mg
- Sagbee Extract - 60 mg

- Kshirkakoli Extract - 60 mg
- Deodar Extract - 60 mg
- Madhuka extract-60m

2nd Month

- Ashmantak Extract - 50 mg
- Krishna Til Extract - 50 mg
- Manjistha Extract - 50 mg
- Shatavari Extract - 50 mg
- Pimpali Extract-50mg

3rd Month

- Kshirkakoli Extract - 80 mg
- Shwet Sariva Extract - 80 mg
- Krushna Sariva Extract - 80 mg
- Priyangu Extract-50mg
- Nilotpala Extract-50mg

4th Month

- Doorva Extract - 50 mg
- Rasna Extract - 50 mg
- Sariva Extract - 50 mg
- Manjstha Extract - 50 mg
- Bharangi Extract-50mg
- Vth Month
-

5th Month

- Ringani Extract - 50 mg
- Dorli Extract - 50 mg
- Vatankur Extract - 50 mg
- Vatasal Extract - 50 mg
- Gambhari Extract-50mg

Pharmacology

१. शतावरी


- गण – बल्य, वयस्थापन, मधुराक्षन्द, (चरक)
  वदारिगंधादि, कण्टकपंचमूल, पित्तप्रशमन (सुश्रुत)
- कुल – ॲस्परॅगस (लिलिॲसीई)
- गुण – रस – मधुर, तिक्त
- वीर्य – शीत, विपाक –
- विपाक – मधुर
- गुणधर्म – गुरू, स्निग्ध, मृदु
- दोषघ्नता – पित्तघ्न, तिक्त, शीत, वातघ्न
- रोगघ्नता – अभ्यंग, वात–पित्तज शिरोरोग, वातव्याधी, दाह शामक, बल्य, विस्फोट, मसूरिका.
- ग्रंथोक्त वर्णन

  शतावरी गुरुः शीता तिक्तास्वाद्वी रसायनी।

  मेधाग्निपुष्टिदा स्निग्धा नेत्र्या गुल्मातिसारजित।

  शुक्रस्तन्यकरी बल्या वातपित्तस्रशोथजित।।

  भावप्रकाश

ASPARAGUS- The roots are used in Ayurvedic medicine, following a regimen of processing and drying. It is generally used as a uterine tonic, as a

galactogogue (to improve breast milk), in hyperacidity, and as a general health tonic. It is also used as an anodyne and aphrodisiac.

Shatavari is considered to be the main Ayurvedic rejuvenating female tonic for overall health and vitality. The reputed adaptogenic effects of Shatavari may be attributed to its concentrations of saponins, known as Shatavarins. In Sanskrit, Shatavari means "she who possesses a hundred husbands."

It increases shukra by causing nutrition of shukra and the preceding dhatus, it increases bala and causes nutrition of patient.it nourishes garbhashaya and gives strength to muscles and raktadhatu associated with it. It is also artavkara and also prevents abortions.

Asparagus racemosus has been shown to mitigate the discomfort due to Amlapitta (Acid dyspepsia with or without ulcer) on 109 cases in a clinical Study at Central Research Institute for Ayurveda, New-Delhi. (T.N. Pandey and S.S. Rajagopalan -- Journal of Research in Ayurveda and Siddha -- Vol-XV. No. 1-2. pages 23-34.) This estrogenic activity is due to the presence of steroidal saponins which exert hormone like actions in the body, and also due to the isoflavones which have mild estrogenic activity that help to balance the estrogen levels[1].

A study shows significant increases in size of the breast and teats has been reported .Histological study of breast tissues showed hyperplasia which was not like the changes typical of late pregnancy and lactation. The increase in lobular tissue signifies better lactation. The effect is being hypothesized due to the phytoestrogens. [2]

Studies have shown that “Shatavarin “ isolated from root mimic like female estrogen hormone and even replace it from its receptors. studies support the role of phytoestrogens in lowering the risk of various types of cancers (especially breast and prostate cancer), cardiovascular and neuronal diseases. [3]

A study demonstrated that the alcoholic extract of Asparagus racemosus(rhizome) administered orally to adult pregnant female albino rats at a dose of 30 mg/100 g body weight, daily for 15 days (days 1-15 of gestation) exerted an estrogenic activity. The macroscopic findings revealed a prominence of the mammary glands, a dilated vaginal opening and a transversely situated uterine horn in the treated group of animals. The weight of the uterine horns of the treated group was found to be significantly higher ($p < 0.001$) but the length was shorter ($p > 0.01$). Microscopic

examination of the treated group showed proliferation in the lumen of the duct of mammary gland. It was obliterated due to hypertrophy of ductal and glandular cells. Hyperplasia of the glandular and muscular tissue and hypertrophy of the glandular cells were observed in the genital organs. The parenchyma of the genital organs showed abundant glycogen granules with dilated blood vessels and thickening of the epithelial lining. The oviduct in the treated group showed hypertrophied muscular wall, whereas the ovary revealed no effect of the drug. The results suggest an oestrogenic effect of Shatavari on the female mammary gland and genital organs[4].

A study revealed that the alcoholic extract of the root of Asparagus racemosus exhibited antioxytocic activity. The saponin-glycoside A4 in doses of 20-50 µg/ml produced a specific and competitive block of the pitocin syntocinon - induced contraction of rat, guinea pig and rabbit uteri in vitro as well as in situ. The steroidal saponin also blocked the spontaneous uterine motility and is believed to have an estrogen like activity.[5]

Studies show a polycyclic alkaloid asparagamine A is reported to have an antioxytocic action indicating an anti abortifacient affect. [6]

२. मधुक

- गण – बल्य
- कुल – मधुक कुल
- प्रकार – जल मधुक
- गुण –
- रस – मधुर, कषाय
- वीर्य – शीत
- विपाक – मधुर
- गुणधर्म – गुरू
- शुष्क पुष्प – लघु
- दोषघ्नता – वात–पित्तशामक
- स्थानिक – वेदनास्थापन, कुष्ठघ्न, वातव्याधी पुष्पस्वरस–तृष्णा
- ग्रंथोक्त वर्णन –

रक्तपित्तहरण्याहुर्गुरूणि मधुराणि च।

बृंहणीयं मद्यं च मधूककुसुमं गुरू।

वातपित्तोपशमनं फलं तेनोपदिश्यते।।

सुश्रुत सूत्रस्थान

MOHA TREE-Madhuca longifolia, commonly known as **mahwa** or **mahua**, is an Indian tropical tree found largely in the central and north Indian plains

and forests. It is a fast growing tree that grows to approximately 20 meters in height, possesses evergreen or semi-evergreen foliage, and belongs to the family Sapotaceae.

It is cultivated in warm and humid regions for its oleaginous seeds, its flowers and its wood; producing between 20 and 200 kg of seeds annually per tree, depending on maturity. The oil (solid at ambient temperature) is used for the care of the skin. Several parts of the tree, including the bark, are used for their medicinal properties.

- Mahuwa Flower is edible and is a food item. Flowers are used to make syrup for medicinal purposes.

३. मंजिष्ठा

- गण : वर्ण्य, विषघ्न, ज्वरहर (चरक)
- प्रियंग्वादि, पित्तसंशमन (सुश्रुत)
- कुल : मंजिष्ठादि
- गुण :
- रस – तिक्त, कषाय, मधुर
- वीर्य – उष्ण
- विपाक – कटु
- गुणधर्म – गुरू, रूक्ष
- दोषघ्नता : कफघ्न, वातघ्न, पित्तघ्न (त्रिदोषघ्न)
- रोगघ्नता – कुष्ठ, व्रणज शोथ, व्रण रोपण,
- ग्रंथोक्त वर्णन –

मंजिष्ठा मधुरा तिक्ता कषाया स्वरवर्णकृत।
गुरूष्णा विषश्लेष्मशोथयोन्यक्षि क्ग्रुरुक।
रक्तातिसार कुष्ठास्रवीसर्पव्रणमेहनुत।।

भावप्रकाश

MANJISHTHA-The roots of Rubia cordifolia are also the source of a medicine used in Ayurveda, this is commonly known in Ayurvedic Sanskrit as Manjistha (or Manjista or Manjishta) and the commercial product in Hindi as Manjith.[3] Traditionally, it is used for treating urinary tract infections and as an anti-inflammatory drug. Its property is guru, its taste is astringent, bitter and sweet, vipak

sweet and ushna virya. It is a powerful anti microbial agent especially in skin and urinary tract infections. It is urolythotriptic and diuretic.18 During pregnancy, urinary infections are common.

It cleanses and stimulates the action of uterus. Hence it is useful in kashtartava, anartava and to purify garbhashaya after delivery. It eliminates backache by causing anulomana of apana vayu and raja associated with garbhshaya.

its main action on rasa and raktavaha srotasas. It purifies blood by digesting raktagata dushta kapha pitta by its tikta kashya and madhura rasa and ruksha guna. It pacifies all the three doshas associated with blood . hence it is varnya.

Rubia cordifolia – Direct pharmacological activity on reproductive system has not been reported. Found to be a good haematinic, anti oxidant and immunostimulant**.**

४. तिल

- गण – बल्य
- कुल – तिल कुल
- प्रकार – श्वेत, कृष्ण, रक्त उपयुक्तांग – बीज, तैल, मूल
- गुण –
- रस – मधुर, कषाय, तिक्त, कटु
- वीर्य – उष्ण
- विपाक –मधुर
- दोषघ्नता – वातशामक, कफ–पित्तकर
- रोगघ्नता – अभ्यंग,कुष्ठ, वेदनास्थापन, शिर:शूल, अंगमर्दपक्षाघात, उष्ण कल्क लेपनार्थ संधिशूले, शोथे च।
- ग्रंथोक्त वर्णन –

स्निग्धोष्णो मधुरस्तिक्त: कषाय: कटुकस्तिल:।
त्वच्य: केश्यश्च बल्यश्च वातघ्न: कफपित्तकृत।।

चरक सूत्रस्थान

SESAME- It is grown primarily for its oil-rich seeds, which come in a variety of colors, from cream-white to charcoal-black. In general, the paler varieties of sesame seem to be more valued in the West and Middle East, while the black varieties are prized in the Far East. The small sesame seed is used whole in cooking for its rich nutty flavour (although such heating damages their healthful polyunsaturated fats), and also yields sesame oil.

It is vajikarana and stanyajanana, balya in general weakness , snehana in kushtha, anartava, kashtartava and decreasd libido.

The seeds are exceptionally rich in iron, magnesium, manganese, copper, and calcium (90 mg per tablespoon[5] for unhulled seeds, 10 mg for hulled), and contain vitamin B_1 (thiamine) and vitamin E (tocopherol).[6] They contain lignans, including unique content of sesamin, which are phytoestrogens with antioxidant and anti-cancer properties. Among edible oils from six plants, sesame oil had the highest antioxidant content. Sesame seeds also contain phytosterols associated with reduced levels of blood cholesterol. The nutrients of sesame seeds are better absorbed if they are ground or pulverized before consumption, as in tahini.

Sesame seeds are rich in compounds with powerful antioxidant properties, it's belongs to its lignan which consists of about 1.5 % of the sesame seeds or oil, the majority of which are sesamin and sesamolin. Sesame seed consumption appears to increase plasma gammatecopherol and enhance vitamin E activity which in turn prevent cancer and heart diseases (8). Animal studies provided some scientific evidence for its antiaging effect. Intestinal microflora convert lignans into Enterolactone and Enterodiol agents which are responsible for its estrogenic activity.

Sesame seeds contain a high amount of the anti-nutrient phytic acid.

Sesame seeds produce an allergic reaction in a small percentage of the general population.

५. यष्टिमधु :

- गण : क़ंठ्य, ज़ीवनिय, संन्धानीय, वर्ण्य, कण्डूघ्न, मूत्र विरजनीय, शोणितस्थापन, च्छर्दी निग्रहण स्नेहोपग, वमनोपग, अस्थापनोपग (चरक)
- क़कोल्यदि, सारिवादि, अंजनादि (सुश्रुत)
- कुल : शिम्बी,
- उपकुल : अपराजिता
- प्रकार : जलज. स्थलज
- उपयुक्त अंग : मूल
- गुण :
- रस – मधुर
- वीर्य – शीत
- विपाक – मधुर
- गुण – मधुर स्निग्ध
- दोषघ्नता – पित्तघ्न, वातघ्न. कफकर
- रोगघ्नता – स्थानिक कार्य – वेदनास्थापन, दाहशामक
- ग्रंथोक्त वर्णन :

  यष्टि हिमा गुरु स्वाद्वी चक्षुष्या बलवर्णकृत।
  सुस्निग्धा शुक्रला केश्या स्वर्या पित्तानिलास्रजित।।
  व्रणशोथविषच्छर्दीर्तृष्णाग्लानिक्षयापहा।

  भावप्रकाश

JESHSHTAMADHA- The compound glycyrrhizic acid, found in liquorice, is now routinely used throughout Japan for the treatment and control of chronic viral hepatitis, and there is a possible transaminase-lowering effect. Hepatoprotective mechanisms have been demonstrated in mice.[12] Recent studies indicate that glycyrrhizic acid disrupts latent Kaposi sarcoma (as also demonstrated with other herpesvirus infections in the active stage), exhibiting a strong anti-viral effect.

It stimulates formation of shukra due to its madhura vipaka and snigdha and guru gunas and thus increases oja. Improves complexion and maintains youth.it is being shonitstapana; it is useful in anemia and raktapitta caused by vitiation of pitta.

Liquorice affects the body's endocrine system as it contains isoflavones (phytoestrogens). It might lower the amount of serum testosterone slightly, but whether it affects the amount of free testosterone is unclear. Consuming liquorice can prevent hyperkalemia. Large doses of glycyrrhizinic acid and glycyrrhetinic acid in liquorice extract can lead to hypokalemia and serious increases in blood pressure, a syndrome known as apparent mineralocorticoid excess. These side effects stem from the inhibition of the enzyme 11β-hydroxysteroid dehydrogenase (type 2) and subsequent increase in activity of cortisol on the kidney. 11β-hydroxysteroid dehydrogenase normally inactivates cortisol in the kidney; thus, liquorice's inhibition of this enzyme makes the concentration of cortisol appear to increase.

Cortisol acts at the same receptor as the hormone aldosterone in the kidney and the effects mimic aldosterone excess, although aldosterone remains low or normal during liquorice overdose. To decrease the chances of these serious side effects, deglycyrrhizinated liquorice preparations are available. The disabling of similar enzymes in the gut by glycyrrhizinic acid and glycyrrhetinic acid also causes increased mucus and decreased acid secretion. It inhibits Helicobacter pylori, is used as an aid for healing stomach and duodenal ulcers, and in moderate amounts may soothe an upset stomach. Liquorice can be used to treat ileitis, leaky gut syndrome, irritable bowel syndrome and Crohn's disease as it is antispasmodic in the bowels.

The compounded carbenoxolone is derived from liquorice. Some studies indicate it may inhibit an enzyme in the brain that is involved in making stress-related hormones, which have been associated with age-related mental decline.

Estrogen-like activity of glabrene and other constituents are isolated from licorice root.

Licorice root extract and its major isoflavan, glabridin, exhibited varying degrees of estrogen receptor (ER) agonism in different tissues in vitro and in vivo. Animals fed with licorice extract, compared with estradiol and glabridin, showed an increase in creatine kinase (CK) activity, a known marker for estrogen responsive genes, which was higher than expected from the levels of glabridin in the extract. This led us to test for other components that may contribute to this strong estrogen agonist activity. Results indicated that glabrene and isoliquiritigenin, (2′,4′,4-three hydroxy chalcone) (ILC) in the licorice extract can bind to the human ER with higher affinity (IC50, 1 and 0.5 μM) than glabridin (IC50, 5 μM). The stimulatory effects of glabrene in vivo were tissue specific and similar to those of estradiol. The effect of increasing concentrations of glabrene and ILC on the growth of breast tumor cell was biphasic.

Both showed an ER-dependent growth-promoting effect at low concentrations (10 nM–10 μM), and ER-independent antiproliferative activity at concentrations >15 μM. This is the first study to indicate that glabrene, an isoflavene exerted varying degrees of ER agonism in different tissues.Estrogenic Activity of Glycyrrhiza Glabra with its Effect upon Uterine Motility at various Stages of Sex Cycle. Glycyrrhiza glabra grown in Egypt proved to be a high estrogenic plant as proved by uterine response and vaginal opening.

Based upon the mouse-uterine-weight method, three doses of 25 mg. each of the alcoholic extract showed an estrogenic activity which, in terms of estradiol monobenzoate, is 1:4716980.A higher dose of 50 mg. daily for 3 days proved to possess a lower estrogenic activity when compared with estradiol monobenzoate. Using this dose, Glycyrrhiza extract was 1: 8670520 the activity of estradiol monobenzoate. This suggests the presence of anti-hormone factor(s) in the alcoholic extract of the plant.

Upon uterine motility, the extracted plant manifested an inhibitory influence upon the spontaneous movement of the organ at di-estrus, estrus and pregnancy.Glycyrrhiza glabra has been found to be a rich source of flavanoids and isoflavanoids, which are responsible for its estrogenic activity.

Glycyrrhizin and glycyrrhinitic acid from this plant are shown to be good antioxidants. They inhibit thiobarbituric acid reactive reactive substances (TBARS) formation and restore superoxide dismutase (SOD)." Glycyrrhizin inhibits ROS generated by neutrophils and acts as an anti-inflammatory agent at the site of inflammation. Its anti-inflammatory action is based on its weak deoxycortisone-like and ACTH action. Glycyrrhizin possesses antiviral activity against HIV.12,13 It is also a potent immunomodulatory with anticomplimentary action. Glycyrrhenitic acid also possesses antioxidant activity.14 Glabridin from Gglabra prevents LDL oxidation.

६. सारिवा

- गण – स्तन्यशोधन, पुरिषसंग्रहणीय, ज्वरहर, दाहप्रशमन, मधुरास्कंद,(चरक)
- सारिवादि, विदारिगंधादी, वल्लीपंचमूल (सुश्रुत)
- कुल – अर्क कुल
- प्रकार : श्वेत, कृष्ण
- उपयुक्त अंग – मूल
- गुण : मधुर, तिक्त
- रस – मधुर
- वीर्य –शीत
- विपाक – मधुर
- गुणधर्म – गुरु, स्निग्ध
- दोषघ्नता – वातशमन, पित्तशमन, कफशमन (त्रिदोषशमन)
- रोगघ्नता – स्थानिक: अंजन (नेत्राभिष्यंद), दाहघ्न, शोथाघ्न
- ग्रंथोक्त वर्णन :

  सारिवायुगलं स्वादु स्निग्धं शुक्रकरं गुरु।
  अग्निमांद्यरुचिश्वासकासामविषनाशनम।।
  दोषत्रयास्रप्रदरज्वरातिसारनाशनम।।

  भावप्रकाश

SARIVA-It is used in traditional medicine. In Ayurveda it goes by the name of ananthamoola or Anantmula. It is also called the False Sarsaparilla. The plant enjoys a status as tonic, alterative, demulcent, diaphoretic, diuretic and blood purifier. It is employed in nutritional disorders, syphilis, chronic rheumatism, gravel and other

urinary diseases and skin affections. It is administered in the form of powder, infusion or decoction as syrup. It is also a component of several medicinal preparations. Sariva is known for their diuretic, anti pyretic and anti oxidant properties

It is one of the Rasayana plants of Ayurveda, as it is anabolic in its effect. It stimulates the flow of bile and removes toxins from the body. It is a good diuretic and increases flow of urine three to four times. When used with Tinospora, the herb's effect is enhanced further. It relieves inflammation of urethra and burning micturition and is also helpful for third or fourth stages of syphilis.

Chemical analysis of the root showed the presence of coumarins, volatile oil the chief component of which is p-methoxy salicylic aldehyde, two sterols and a pregnane glycoside.

It increases oja and shukra by its madhura, snigdha and sheeta gunas. Hence, used in debility of shukra.Sariva and sarivadigana should be used as raktaprasadana and stambhana in pradara and Pittaja and raktaja yonirogas.

Modern research-Zhydroxy-4methoxy benzaldehyde isolated from the root showed significant anti-inflammatory activity against chronic inflammation in albino rats in 100 mgm/kg dose orally. The drugalso revealed significant antifungal activity in experimental and clinical studies.

It is occurring over the greater part of India, from the upper Gangetic plain eastwards to Assam and in some places in central, western and South India.

७. भारंगी

- गण : पिप्पल्यादि
- कुल : निर्गुण्डी कुल
- उपयुक्तांग – मूल
- गुण –
- रस – तिक्त, कटु, कषाय
- वीर्य – उष्ण
- विपाक – कटु
- गुणधर्म – लघु, रूक्ष.
- दोषघ्नता – क्फघ्न, वाताघ्न
- रोगघ्नता – शोथहर, व्रण पाचन
- ग्रंथोक्त वर्णन–

भार्गीं रूक्षा कटुस्तिक्ता रुच्चोष्णा पाचनी लघुः।
दीपनी तुवरा गुल्मरक्तनुन्नाशयेद ध्रुवम।।
शोथकासकफश्वासपीनसज्वरमारुतान।।

भावप्रकाश.

BHARANGI -In 1997, phylogenetic analysis of DNA data showed that Clerodendrum, as then understood, was polyphyletic. This situation was remedied in 1998 with the revival of Rotheca. This taxonomic change was based on

previous work and on a molecular phylogenetic study that was not published until the following year.

Bharangi (Clerodendrom serratum) have potent anti inflammatory, analgesic and anti oxidant properties. Its tastes are bitter, pungent and astringent, its vipak (alkaline post digestion ash) is pungent, it is ushna virya (increase BMR) and is anabolic and acute.18 it is an excellent anti-histaminic agent and on prolonged administration causes protection against anaphylaxis. It is anti-inflaaamatory and an immunomodulator.

It is commonly recommended in bronchial asthma, fevers, chronic conditions, e.g. sinusitis. It is anti-inflammatory," anti-allergic and anti-nodceptive. Being tikta , katu, and ushna , it is agnideepana,amapachana, and anulomana. Hence it is used in aruchi,agnimandya. It should be used in diseases of raktadhatu being rakta shudhhikara.

८. पिप्पली

- गण – कासहर, हिक्कानिग्रहण, शिरोविरेचन,वमन, तृप्निघ्न, दीपनीय, शूलप्रशमन (चरक)
- पिप्पल्यादि, ऊर्ध्वभागहर, शिरोविरेचन (सुश्रुत)
- कुल : पिप्पल्यादि
- प्रकार – १) पिप्पलि २) गज पिप्पलि ३) सिंहली ४) वन पिप्पली
- गुण : (नूतन, आर्द्र)
- रस – मधुर
- वीर्य – शीत
- विपाक – मधुर
- गुणधर्म – गुरू
- गुण – (पुराण, शुष्क)
- रस – कटु
- वीर्य – अनुष्ण
- विपाक – मधुर
- गुणधर्म – लघु, स्निग्ध, तीक्ष्ण
- दोषघ्नता (नूतन, आर्द्र)–कफवातवर्धक
  (पुराण , शुष्क)–कफघ्न, पित्तकर,वातशामक, उष्ण, स्निग्ध
- स्थानिक – रक्तोत्क्लेशकर, शिरोविरेचन, शोथाघ्न

- ग्रंथोक्त वर्णन

पिप्पली प्लीहोदरे श्रेष्ठमौषधम।

पिप्पली रेचनी हन्ति श्वासकासोदरज्वरान।

कुष्ठप्रमेहगुल्मार्श: प्लीहा शूलाममारुतान।।

पिप्पली दीपनी वृष्या स्वादुपाका एसायनी।

अनुष्णा कटुका स्निग्धा वातश्लेष्महरी लघु: ।।

बृहन्निघण्टु

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The Ayurvedic texts list pippali as one of the most powerful Rasayana herbs, meaning it is a longevity enhancer. Pippali is one of the most widely used Ayurvedic herbs. It is pungent in taste and sweet (Neutral ash) in vipak, is described as Anushna sheeta (it does not raise BMR), and its special gunas are catabolic, unctuous and acute." It is an acclaimed rasayana. Its anti-allergic action reduces passive cutaneous sensitivity and protects against antigen-induced bronchospasm and protects mast cells. It effectively suppresses cutaneous anaphylaxis in animals. It is hepatoprotective and is also a good bio enhancer. It is an effective adaptogen and immunomodulator. Since Pippalimula is garbhashayasankochaka and pippali is vrishya,they be used in rajorodha, sankashtaprasava and shukradaurablya.

९. कमल

- गण : मूत्रविरजनीय (चरक)
- कुल – कमल कुल
- प्रकार – श्वेत, रक्त, नील
- उपयुक्तांग – पुष्प, बीज, मूल, पंचांग
- गुण :
- रस – कषाय, मधुर, तिक्त
- वीर्य – शीत,
- विपाक – मधुर
- गुणधर्म – गुरू, पिच्छिल
- बीज :
- रस – मधुर
- वीर्य – मधुर
- विपाक – मधुर
- गुणधर्म – गुरू
- ग्रंथोक्त वर्णन

कमलं शीतलं वर्ण्यं मधुरं कफपित्तजित।
तृष्णादाहास्रविस्फोट विषवीसर्पनाशनम।।
पद्मबीजं हिमं स्वादु कषायं तिक्तकं गुरु:।।

भावप्रकाश

LOTUS- Binomial name:Nelumbo nucifera Gaertn.**Synonyms:** Nelumbium speciosum Willd. Nymphaea nelumbo

Nelumbo nucifera, known by a number of names including Indian Lotus, Sacred Lotus, Bean of India, or simply Lotus, is a plant in the Nelumbonaceae family. Botanically, Nelumbo nucifera (Gaertn.) may also be referred to by its former names, Nelumbium speciosum (Willd.) or Nymphaea nelumbo. The seeds may remain viable for many years, with the oldest recorded lotus germination being from that of seeds 1300 years old recovered from a dry lakebed in northeastern China.[1]A common misconception is referring to the lotus as a waterlily (Nymphaea), an entirely different plant as can be seen from the center of the flower, which clearly lacks the structure that goes on to form the distinctive circular seed pod in the Nelumbo nucifera. Waterlilies come in various colors, whereas the lotus has flowers only in hues of pink, or white.

Native to Greater India and Bangladesh, it is commonly cultivated in water gardens. The lotus is the national flower of India and Vietnam.

The roots of Nelumbo nucifera are planted in the soil of the pond or river bottom, while the leaves float on top of the water surface. The flowers are usually found on thick stems rising several centimeters above the water. The plant normally grows up to a height of about 150 cm and a horizontal spread of up to 3 meters, but some unverified reports place the height as high as over 5 meters. The leaves may be as large as 60 cm in diameter, while the showy flowers can be up to 20 cm in diameter.Researchers report that the lotus has the remarkable ability to regulate the temperature of its flowers to within a narrow range just as humans and other warmblooded animals do.

The traditional Sacred Lotus is distantly related to Nymphaea caerulea,. Both Nymphaea caerulea and Nelumbo nucifera contain the alkaloids nuciferine and aporphine.

Being chhardi nigrahana, trishnanigrahana and stambhana, it should be used in chhardi, atisara and pravahika. Being hridya and shonitsthapana is useful in hridroga. Being prajasthapana is used for nutrition foetus and in pregnancy for stopping discharges. Being balya and vishghna, is useful in kshaya to increase strength and to stop diarrhoea.

१०.अश्मंतक

- गण – मूत्रसंग्रहणीय, कषायस्कंद, (चरक)
- कुल – वट कुल
- उपयुक्तांग – त्वक, क्षीर, फल
- रस – कषाय, वीर्य – शीत
- विपाक – कटु
- गुणधर्म – लघु, रूक्ष
- दोषघ्नता – कफ–पित्त शामक
- रोगघ्नता – कृमिघ्न, वामक, कफ नि:स्सारक, मूत्रसंग्राहक
- ग्रंथोक्त वर्णन:

अश्मंतक: कषायस्तु हिम: पित्तकफापह: ।
कषाय शीतसंग्राही कफपित्तास्रदोषनुत ।।
धन्वन्तरी निघण्टु
कोविदरोऽपितद्वत्स्यात्तयो: पुष्पं लघु स्मृतम ।
रूक्ष संग्राहि पित्तास्रप्रदरक्षयकासनुत ।।

भावप्रकाश

ASHMANTAK- very popular ornamental tree in subtropical and tropical climates,In the Neotropics, it can be used to attract Sapphire-spangled Emerald ,Glittering-bellied Emerald or White-throated Hummingbird into gardens and parks[1]. It has antibacterial and anti-inflammatory properties. It induces non-specific resistance and is rich in adaptogens. It eliminates the contaminated (Dushit) substances.

११.विदारी:

- गण – बल्य, बृंहणीय, वर्ण्य, कण्ठ्य, स्नेहोपग, मधुस्कंद,(चरक)
- विदारिगंधादी, वल्लिपंचमूल, पित्तसंशमन
- उपयुक्तांग – कन्द
- गुणधर्म – रस – मधुर
- वीर्य – शीत
- विपाक – मधुर
- गुणधर्म – गुरू, स्निग्ध
- दोषघ्नता – वात–पित्ताशामक
- रोगघ्नता – पित्तज व्याधी, यक्रुत–प्लीहावृद्धी, विबंध
- ग्रंथोक्त वर्णन

विदारी मधुरा स्निग्धा बृंहणी स्तन्यशुक्रदा।
शीता स्वर्या मूत्रला च जीवनी बलवर्णदा।
गुरुः पित्तास्रपवनदाहान हन्ति रसायनम।।

भावप्रकाश

VIDARI-Being madhura and snigdha vidari is very good rasayanam. Also helps to gain weight. Also diurectic in action.It gives good complexion and strength.Useful in Pittasaraka and anulomana. in shukrameha and stanyakshaya being vrishya and stanyajanana. As varnya, jvaragna and dahashamana and in daurbalya,kshaya and shosha.

१२.वट

- गण – मूत्रसंग्रहणीय, कषायस्कंद (चरक)
- न्यग्रोधादी (सुश्रुत)
- क्षीरी वृक्ष (भावप्रकाश)
- कुल – वट कुल
- उपयुक्तांग – त्वक, क्षीर, पत्र, वटप्ररोह, फल
- रस – कषाय
- वीर्य – शीत
- विपाक – कटु
- गुणधर्म – गुरू, रूक्ष
- दोषघ्नता – कफ–पित्तघ्न
- रोगघ्नता – शोथहर, वेदनास्थापन, व्रणरोपण, चक्षुश्य, स्तम्भक
- ग्रंथोक्त वर्णन –

वट: शीतो गुरुर्ग्राही कफपित्तव्रणापह:।
वर्ण्यो विसर्पदाहघ्न: कषायो योनिदोषहृत।
वटांकुरा मसूरश्च प्रलेपाद्व्यअंगनाशनम।।

भावप्रकाश

VAT-The figs are eaten by birds and mammals. Fig seeds are dispersed by birds such as the Indian Mynas and studies have shown that seeds that

pass through the digestive system of the bird are more likely to germinate as well as sprout earlier.

Bark and the axillary bud contain 10 % tannins. Besides this it contains certain alkaloids and mineral and certain vitamins.

It is kapha and pitta suppressant. It helps in wound healing and suppresses inflammation. It acts as a good pain reliever. It also improves vision of eyes. It helps in easy absorption and improves blood circulation in the body. It helps in purifying blood. It tones up the excretory system. It is an aphrodisiac agent. It also helps in treating skin related problems and also in reducing the burning sensation.

Being stambhana is used in chhardi, atisara, and pravahika. Being raktashodhana and raktapittahara is used in varnavikara, raktavikara and raktapitta.

Uttarbasti of bark decoction is useful in rakta and shevetpradara as it is garbhshayashothahara. Also used as Vatahrungaas garbhsthapana and ksheera as it is shukrastambhana.

१३.रास्ना:

- रस – तिक्त,
- वीर्य – उष्ण
- विपाक – कटु
- गुणधर्म – गुरु
- दोषघ्नता – वात–कफघ्न
- रोगघ्नता – शोथहर, श्वास, वात्रक्त, वातज शूल, उदर, कास, ज्वर, विषविकार, वातरोग, सिध्मकुष्ठ
- ग्रंथोक्त वर्णन –

रास्ना तु त्रिविधा प्रोक्ता मूलं तृणं तथा।
ज्ञेयौ मूलदलौ श्रेष्ठौ तृणरास्ना तु मध्यमा ।।
राजनिघण्टु
गिरौ च लघु रास्ना स्यात्ततो हीनगुणा स्मृता।।

शिवदत्त

NIGUNDI- Binomial name: Vitex negundo. The leaves of V. negundo possess discutient properties and are applied to rheumatic swellings of the joints and in sprains. They may be applied locally to swellings from rheumatic arthritis and sprains.

Two varieties are recognized, one with white flowers (shwetapushpi), and the other with blue flowers (pushpnilika).

The juice of the leaves is used for the treatment of fetid discharges. The principal constituents the leaf juice are casticin, isoorientin, chrysophenol D, luteolin, p–hydroxybenzoic acid and D-fructose. The plant has anti-inflammatory, antibacterial, antifungal and analgesic activities. These properties are useful in the treatment of superficial bruises, injuries, sores and skin infections.

The essential oil of V. negundo has been used to reduce inflammation and swelling of joints due to rheumatism and injuries. The main constituents of the oil are sabinene, linalool, terpinen-4-ol, β-caryophyllene, α-guaiene and globulol constituting 61.8% of the oil.

Nigundi is pungent, bitter and astringent in taste, pungent in the post digestive effect and has hot potency. It alleviates vata and kapha doshas, but aggravates the pitta dosha. It possesses light and dry attributes. It has antipyretic, anti-arthritic and anti-inflammatory properties and is used in diseases like fever, worms, dermatoses, adenitis and splenic diseases etc.Rasna have. potent anti inflammatory, analgesic and anti oxidant properties. It is guru (anabolic) in character, bitter in taste, vipak is pungent and virya is ushna. In Ayurveda, it is advised for the relief of all types of inflammations of joints, especially useful in autoimmune disorders like rheumatoid diseases. It is an anti inflammatory agent.18 It is also a powerful antibacterial and antifungal agent and suppresses autoimmune activity.

१४.कण्टकारी:

- गण – कासहर, कन्ठ्य, हिक्कानिग्रहण, शीतप्रशमन, अंगमर्दप्रशमन,(चरक)
- बृहत्तत्रयादि, वरुणादि, लघुपंचमूल, (सुश्रुत)
- कुल – कण्टकारी (सोलॅनॅसीई)
- उपयुक्तांग – पंचांग,
- गुण – रस – तिक्त, कटु
- वीर्य – उष्ण
- विपाक – कटु
- गुणधर्म – लघु, रूक्ष, सर
- दोषघ्नता – कफघ्न,
- रोगघ्नता – दंत रोग, कृमीदंत, अर्श, नासारोग (नस्य), शोथोहर, अर्धावभेदक, अन्नहव स्रोतस व्याधी, श्वास, कास , हिक्का
- ग्रंथोक्त वर्णन –

  कण्टकारी सरा तिक्ता कटुका दीपनी लघु:।
  रूक्षोष्णा पाचनी कासश्वासज्वरकफानिलान।।
  निहन्ति पीनसश्वासपार्श्वपीडाहृदाम्यान।।

  भाव प्रकाश

KANTAKARI- Solanum xanthocarpu, Product offered **:** Fruits, Wholeplant.**Uses:** Fruits eaten as an anthelmintic and for indigestion. Root is an expectorant, used in Ayurvedic medicine for cough, asthma and chest pain. Also used for flatulence, sore throat, and toothache. Has high concentration of solasodine, a starting material for the manufacture of cortisone and sex hormones. It cures asthma, cough, bronchspasm, sore throat, constipation, an effective expectorant and diuretic.

Bhavamisra, an ancient physician, mentions it as promoting conception in females. Given with honey, tulsi (Ocimum sanctum), datura (Datura metal), and black pepper it can be effective in cases of bronchial asthma. Stem, flowers and fruits are bitter and carminative and are prescribed for relief in burning sensation in the feet. Leaves are applied locally to relieve pain.

It should be used in agnimandya, vibandha and purishaja krimi being deepana-pachana due to tikta katu rasas and its ushna veerya since it eliminates vitiated kapha and hence it is krimighna; it acts as virechana by irritating the intestines also.

It should be used in amavata, kushtha and phiranga being alterative and amapachana due to its tikta katu rasas; in shotha since it reduces kleda by its rooksha guna and in hypertension as it reduces raised blood pressure.

Being oxytocic (garbhshaya sankochaka), the seed is useful in anavarta and obstructed labour. ,being garbhasthapana,kalka of the shveta pushpa kantakari root made with milk be given and it is advised that drops of sidhha dugdha be instilled in the right ang left nostril to have male or female progency respectively.

१५.दूर्वा:

- गण – प्रजास्थापन, वर्ण्य (चरक)
- कुल – यव कुल
- पर्याय शब्द –
- उपयुक्त अंग – पंचांग
- रस – कषाय
- वीर्य – शीत
- विपाक – मधुर
- गुणधर्म – लघु
- दोषघ्नता – कफ–पित्त शामक
- रोगघ्नता – रक्त स्तम्भक, व्रणरोपण, दाह प्रशमन, वर्ण्य, तृष्णानिग्रहण, रक्त पित्त
- ग्रंथोक्त वर्णन –

दूर्वा: कषाय मधुराश्च शीता: पित्ततृषारोचकवान्तिहन्त्य: ।
सदाहमूर्च्छाग्रहभूतशान्तिश्लेष्मश्रमध्वंसनतृप्तिदश्च ।।

राज निघण्टु

DOORVAA: Binomial Name:Cynodon dactylon,Cynodon dactylon has been studied at the University of Allahabad in India, and is said to have many medicinal properties including antimicrobial and antiviral properties, as well as

treatment of urinary tract infections, prostatitis, syphilis, and dysentery.[4] Primarily the research being conducted on C. dactylon involves its glycemic potential, which is involved in the treatment of diabetes.

The majority of research has only been performed on lab rats, but the results are interesting. In laboratory rats treated with the ethanolic extract of defatted C. dactylon, hypoglycemic and anti-diabetic results were observed on the blood glucose levels of the tested population.[4] Test populations showed nearly a 50% drop in blood glucose levels when the proper dosage was administered.[4]

There is potential for Cynodon dactylon to become an alternative to current diabetes medications in the future. Widely used in toothache & amibiasis (dysentry) (citation needed).

Being chhardi and trishnanigrahana and stambhanais used in niramavashtha of chhardi, atisara and pravahika and arsha and in raktapitta and raktastambhaka.

Being prajasthapana and since it eliminates garbhashayashaithilya should be used in pradara, garbhsrava-pata and in yonivyapada as raktastambhana, garbhashaya balya and as garbhposhana. It is also used in samanyadaurblya being jeevniya.

१६.साग:

- गण – गर्भसंधानकर, रक्तप्रसादन
- कुल – शाक वर्ग
- उपयुक्त अंग –त्वक, पर्ण, पुष्प, बीज
- रस – कषाय
- वीर्य – शीत
- विपाक – कटु
- गुणधर्म – कषाय, ग्राही, शीत, गर्भस्थापक, रक्तपित्तघ्न
- दोषघ्नता – त्रिदोषहर
- रोगघ्नता – रक्त विकार, पित्तविकार, कुष्ठघ्न, प्रमेहघ्न, केश्य, व्रणरोपण
- ग्रंथोक्त वर्णन –

शाक: कषाय: शिशिरो रक्तपित्त प्रसादन: ।
कुष्ठ श्लेष्मानिलहरो गर्भसंधानस्थैर्यकृत ।।
शाकपुष्पं प्रमेहघ्नं तुवरतिक्तकम ।
कफपित्तहरं वातं कोपनं विशदं लघु ।।

कैयदेव निघण्टु

SAAG-Binomial name: Tectona grandis l.f.. effect of tectona grandis stem extract on estradiol benzoate injected uterus of female albino wistar rats

Activity of stem extract of Tectona grandis on rat uterine contraction induced by oxytocin studied by the method described by H. Gerhard Vogel on the basis of prostaglandin biosynthesis as per Vane and Williams . Tectona grandis stem extract has shown uterine relaxant activity in dose dependent manner complete inhibition of contraction (100%) was noted in 32 mg dose of Tectona grandis stem extract same as that produced by standard uterine relaxants i.e. injection Magnesium sulfate (75 mg), Cap. Nifedipine (0.18 mg), injection Isoxsuprine (0.18 mg) where p value was highly significant ($p<0.001$).This activity because of inhibition of prostaglandin biosynthesis.

This shows that Tectona grandis stem extract have similar activity as magnesium sulfate, nifedipine, isoxsuprine but differ in the dose.The uterine relaxant effect of Tectona grandis stem extract supported documentation of relaxant effect in Ayurveda. This is also confirmed in our study. We also tried this experiment on normal i.e. without the prior injection of oestradiol uterus of rat but there is no contraction after giving oxytocin may be due to non induction of oxytocin receptors.

Evaluation of oestrogenicity and pregnancy interceptory efficacy of lapachol (2-hydroxy-3-(3-methyl-2-butenyl)-1,4-naphthoquinone) in the mouse. Lapachol, a naphthoquinone isolated from *Tectona grandis* was evaluated for its oestrogenicity and antinidational activity in the mouse and was found to possess a statistically significant ($p < 0.001$) uterotrophic effect after administration of the drug at a dose of 20 mg/kg body weight/day/mouse, intramuscularly. However, in comparison with conjugated oestrogen, the drug proved to be a relatively weak oestrogenic. Lapachol when administered at the same dose level exhibited interceptory activity at all stages of early pregnancy.

Mainly used in garbhsandhankar and rakta prasdaka and is very much useful in pregnancy.

१७.देवदार:

- गण – स्तन्यशोधन, अनुवासनोपग, कटुकस्कंध, वातसंशमन,
- कुल; सरल कुल
- रस – तिक्त
- विपाक – कटु
- वीर्य – उष्ण
- गुण – लघु, स्निग्ध
- दोषघ्नता : कफघ्न वातघ्न, पित्तकर
- रोगघ्नता : व्रण शोधन, आम वात, व्रण रोपण, गर्भाशय शोधन
- ग्रंथोक्त वर्णन –

देवदारू लघु स्निग्धं तिक्तोष्णं कटुपाकी च।
विबंधाध्मानशोथामतन्द्राहिक्का ज्वरास्रजित।
प्रमेहपीनस श्लेष्मकास कण्डुसमीरनुत।।

भाव प्रकाश

DEODAR-Binomial name Cedrus deodara (Roxb.) G.Don.The inner wood is aromatic and used to make incense. Inner wood is distilled into essential oil. As insects avoid this tree, the essential oil is used as insect repellent on the feet of horses, cattle and camels. It also has antifungal properties and has some potential for

control of fungal deterioration of spices during storage. The outer bark and stem are astringent.

Cedar oil is often used for its aromatic properties, especially in aromatherapy. It has a characteristic woody odour which may change somewhat in the course of drying out. The crude oils are often yellowish or darker in colour. Its applications cover soap perfumes, household sprays, floor polishes and insecticides and are also used in microscope work as clearing oil.

It should be used as jvaraghna and to eliminate dushtasravas in sutikaroga being ushna and garbhashayshodhana.

It removes tandra, glani, angagaurava, malavshtambha, mutavarodha eliminats jvarasince these drugs are deepana , pachana and vatanulomana. It is raktaprasdaka being ushna.

१८.प्रियंगु

- कुल – निर्गुण्डी
- स्थानिक नावे – गव्हला
- हिंदी – प्रियंगु
- रस – तिक्त, कषाय, मधुर
- विपाक – कटु
- वीर्य – शीत
- गुण – गुरु, रूक्ष
- दोषघ्नता – त्रिदोष शामक, वात कफघ्न
- रोगघ्नता – वातानुलोमन, रक्तस्तम्भन, दीपन, वेदनास्थापन
- ग्रंथोक्त वर्णन –

प्रियंगु: शीतला तिक्ता तुवरानिलपित्तहा।
रक्तातिसारदौर्गन्ध्यस्वेददाहज्वरापहा।।
गुल्मतृडविष मेहघ्नी तद्वद गंधप्रियंगुका।

भावप्रकाश

PRIYANGU-Botanical name: Callicarpa macrophylla Vahl. Family: Verbenaceae

Ayurvedic properties Rasa : Tikta, Madhura, Kashaya, Katu Guna : Lakhu, Snigdha Virya : Sheeta. Medicinal properties Plant pacify vitiated vata, pitta, diarrhea, arthritis, burning sensation, ulcers, poisonous bites and blackish discoloration on face. Useful part : Flowers, Fruits.

Three sources of Priyangu namely Callicarpa macrophylla, Prunus mahaleb and Seteria italica have no direct pharmacological activity on reproductive system. They are reported to be anti oxidants and Immunomodulators. Being deepana, vatanulomana and raktastambhana is useful in agnimandya shoola gulma and raktatisara. It is useful in pittaja diseases and raktapittabeing raktashodhana and raktapittashamaka. It is useful in samnyadaurblya being katupaushitka**.**

१९.गंभारी

- कुल – निर्गुण्डी
- रस – (मूल) तिक्त कषाय मधुर ; फल – मधुर
- विपाक – (मूल) कटु; फल – मधुर
- वीर्य – (मूल) उष्ण; फल – शीत
- गुण – गुरु
- दोषघ्नता – वातकफघ्न फल – वातपित्तघ्न
- रोगघ्नता – गर्भस्थापन, स्तन्यजनन, वृष्य, शुक्रदौर्बल्यहर
- प्रभाव – गर्भस्राव प्रतिबंधक
- ग्रंथोक्त वर्णन –

काश्मरीतुवरातिक्ता वीर्योष्णामधुरा गुरुः।
दीपनी पाचनी मेध्या भेदिनी भ्रमशोषजित।।
वातपित्ततृषारक्त क्षयमूत्रविबन्ध्नुत।।

भावप्रकाश

GAMBHARI -Gmelina arborea, Jvara, Trsna, Daha, Arsa, Sotha. Leaves are demulcent. Ingredients of “Dasamula”, Fruits enter into cooling decoctions, used in fevers and bilious affections. Roots, bark, fruits are used in diseases of nervous system, oedema, cardiac diseases, pain, dysuria, piles, poisoning, burning sensation, rejuvenator.

The fruit being madhura vipaki, sheeta, guru and snigdha acts as a garbhsthapana, stanyajanana and vrishya. It should be used in shukradaurbalya and to prevent garbhsrav also. Decoction of the root –bark when used in sutikaroga eliminates garbhashayashotha and jwara associated with it and curs stanyavriddhi.

Chemical Composition: The root contains thick yellow oil, an alkaloid and a little amount of benzoic acid. The fruit contains butyric and tartaric acid, an alkaloid, sugar, resin and an astringent principle. The bark contains cleityl furoate, two lignins, melinol and arboriol.

In the present study for the first 20 weeks of pregnancy the patients from the drug treated group (Sushrutokta Garbhini Regimen) received the following herbs. Individually these herbs have many useful properties which are useful for the development and preservation of the intrauterine life. Some of the drugs have action on the blood vessels and the placenta which help in the emplantation and stabilization of the foetus.

The phytochemical study of these twenty herbs is enormous. The isolated principles have some times good effects and some time bad effects. As everybody knows that the fragmented and isolated so called active principles do not exist in nature as they appear to us the when isolated.

1. **Shatavari:** (Asperagus resemosus), contains many principles which are anabolic, strength giving and they build a non-specific resistance in an individual. It promotes proper nutrition of to mother's systems and prevents abortion.
2. **Pimpali:** (Piper longum), It is a well known Rasayana and rejuvenating substance, It is anti-viral and antibacterial. It has anti-inflammatory properties.
3. **Mahua:** (Madhulica longifolia). It is anabolic, strength giving, It is rich in nutrients and it induces sleep.
4. **Ashmantak or Kanchan**: (Bauhinia varigata) It has antibacterial and anti-inflammatory properties. It induces non-specific resistance and is rich in adaptogens. It eliminates the contaminated (Dushit) substances.
5. **Daruharidra:** (Berberis aristata). It is anti dysentery and anti-diarrhoea. It is bacteriosidal and it has ability to return appetite. It prevents implantation problems.

6. **Neel Kamal** :(Nymphaea caerulea) is anti-biliary (Anti-Pitta), it is a mild tranqilizer and it is anxiolytic in nature.
7. **Agnimanth:** (Clerodendron sp) It has adaptogenic properties. It is analgesic and anti-inflammatory. It is antiseptic in nature.
8. **Doorva:** (Cynodon dactylon) It has high vitamin P contents, which are styptic in nature. The juice is anxiolytic and mild tranquilizer. It also contains Vitamin A and iron. The plant is used in 'Adhoga Raktapitta' as it stops bleeding.
9. **Yashtimadhu;** (Glycerrhiza glabra). It is anti inflammatory, anti-tussive, It indices appetite and has hypnotic properties. It is analgesic and relieves pain. It prevents the formation of toxic substances (Aam).
10. **Anant Mool:** (Hemidesmus indicus): It is a blood purifier and an antidote for many food poisons. It has a general cooling effect that helps in reduction of fear and tension.
11. **Ksheerkakoli:** (Gymnema lactiferum): It has properties to stabilize the intrauterine foetus and it strengthens the gravis uterus. It prevents abortion and helps in the general development of the foetus. It maintains proper homeostasis between mother and the foetus
12. **Rakta Kamala:** (Nelumbo nucifera) : The petals of kamal are rich in iron contains. They have a cooling effect, and are generally antacid in nature. It is a mild diuretic.
13. **Dhamasa:** (Uraria picta): This an anabolic and strength giving plant. It induces a type of non-specific resistance and it is adaptogenic. It induces 'spandana' of foetal heart.
14. **Saag:** (Tectona grandis) : It is a mild diuretic and helps in proper emplantation of the foetus. It prevents abortion.
15. **Krushna Til:** (Sesamom indicum): These promote mesodermal development. They have rich oil contents and are nutritional to the foetus. They are strength giving.
16. **Manjishtha:** (Rubia cordifolia): It purifies blood and removes the toxic substances from it. It increases the quantity of blood and is anti-anemic in nature.
17. **Rasna:** (Vitex negundo): It is anti-inflammatory and analgesic. It strengthens the foetal heart and improves its 'spandana'.
18. **Bruhati and Ringani:** (Solanum indicum and Solanum xanthocarpum); They have rich steroids and are anti-inflammatory, analgesic and they have the ability to

prevent ‘garbha sraav’ i. e. pregnancy loss. They induces non-specific, general resistance. They als control the quantity of amniotic fluid.

19. **Vatankur and Vata Twak:** (Ficus bengalensis) : They are astringent substances and generally prevent abortion by their styptic action. They induce longevity and health.

Sushrutokta regimen formulation is devised to fight viral infections, inflammations, oxidative stress and immune processes in the placenta in the pregnant mother for the purpose of safe motherhood. Pregnancy, as a state of oxidative stress, is now a well-recognized fact. There is sufficient laboratory evidence to show that these herbs have excellent antioxidant capability.

It is seen that all the herbs play an important role in pregnancy loss because of its safety and immunomodulatory, antioxidant and antimicrobial actions, which are, the characteristics of most herbal rasayanas. Kshirkakoli being a cotraversial drug , Shatavari is used to replace the drug being from jeevaniya gana.

The Ayurvedic acharyas have attempted to stabilize the foetus by trial and error in the beginning and gaining a lot of practical and clinical experience, they arrived at certain groups of herbs and natural materials they designed what is today known as Garbhini Regimen. Because Sushrut was the pioneer in this field, it became famous later on as ‘Sushrutokta Garbhini Regimen’ (Parichrya).

➢ Meditation During Pregnancy - To Promote Mental Peace

Meditation during pregnancy plays an equally important role in the development of a healthy baby. All expectant mothers want the best for their children. Therefore, maximum care is taken to give the best of food and a nutritious diet to the mother. However, during all these activities it is completely oblivious to all that the mind of the mother too needs to relax and remain at peace for a few hours during the day. Emotions play a vital role in the development of the baby. Examples of stressful mothers giving birth to babies with fluctuating moods, easily going into anger or depression are seen. It is vital for the mother to remain cool and calm and free of any anxiety or stress. With the help of meditation, one can instill harmony within ownself.

This will help to remain free of stress and depression, especially, if d lady is an emotional person.Meditation during pregnancy is a great way to make the lady stronger emotionally and mentally.

With the help of meditation, she gets the capacity to endure pain which helps during labor in pregnancy. It is never easy if she tries to practice meditation on your own during pregnancy. Everybody's mind has the tendency to waver to all places and people with whom you are concerned when you sit with your eyes closed.

The thoughts of your depleting finances or some concern at office, the thought of some meddling family member, the thought of living in ramshackle surroundings and the like are so overpowering that they devour any other thought you wish to put in its place. Meditation is one of the most important exercises during pregnancy. As you gain spiritual health, it is reflected in one's good behavior, one's tolerant attitude and greater affection for their near and dear ones.

Applying the technique for beginners:

There are two options of meditation during pregnancy. One is to join a meditation class for the first few months and then practice on their own. The other is to take the challenge of practicing on their own. If they join a class, they get to meet other expecting mothers and share each other's experiences. They can learn the nuances faster as they have a teacher to guide you and check you if slip somewhere.

Reiki and Vipasana are two popular groups of meditation. If they decide to meditate on their own, they can take the help of the following techniques.

First, search for a place that is peaceful and serene. A place with pin drop silence would be perfect. Make sure no one is allowed to disturb your peace for the stipulated period. Then sit on the floor with legs folded and concentrate on any one object with your eyes closed. Generally, people concentrate on their god or place of worship. While concentrating, take deep breaths as well in perfect rhythm. It will take some time; do not be distracted or discouraged if you do not see results immediately. You will eventually see the results of meditation during pregnancy .

Meditation as per Jain darshan cards was been taught to the 30 patients of sushrutokta regimen group. The card includes Ashta mangal yantra with 24 Dhyan Mudra pratimas in that. Sitting in Sukhasan posture the pratimas and the 8 different yantra pratimas were concentrated by the patients and after that with closed eyes it was recalled. With chanting Navkar mantra in the mind.

ॐ

Navkar Mantra

- **Namo Arihantanam: I bow down to Arihanta,**
- **Namo Siddhanam: I bow down to Siddha,**
- **Namo Ayariyanam: I bow down to Acharya,**
- **Namo Uvajjhayanam: I bow down to Upadhyaya,**
- **Namo Loe Savva-sahunam: I bow down to Sadhu and Sadhvi.**
- **Eso Panch Namokaro: These five bowings downs,**
- **Savva-pavappanasano: Destroy all the sins,**
- **Manglananch Savvesim: Amongst all that is auspicious,**
- **Padhamam Havei Mangalam: This Navkar Mantra is the foremost.**

The Navkar Mantra is the most important mantra in Jainism and can be recited at any time. While reciting the Navkar Mantra, we are bowing down with respect to Arihantas (souls who have reached the state of non-attachment towards worldly process), Siddhas (liberated souls), Ächäryäs (heads of sadhus and sadhvis), Upädhyäyas (those who teach scriptures to sadhus and sadhvis), Sädhus (monks, who have voluntarily given up social, economical and family relationships) and Sädhvis

(nuns, who have voluntarily given up social, economical and family relationships). Collectively, they are called Panch Parmesthi (five supreme spiritual people). In this mantra we worship their virtues rather than worshipping any one particular person; therefore, this Mantra is not named after Lord Mahavir, Lord Parshvanath or Adinath, etc. When we recite Navkar Mantra it, also reminds us that, we need to be like them. This mantra is also called Namaskär or Namokär Mantra because we are bowing down.

The Navkär Mantra contains the main message of Jainism. The message is very clear. If we want to be liberated from this world then we have to take the first step of renunciation by becoming a monk or a nun. This is the beginning. If we stay on the right path then we will proceed to a higher state, Arihant, and ultimately proceed to Siddha after nirvana (liberation from the cycle of birth and death). The goal of every Jain is, or should be, to become a siddha.

Arihantas

The word Arihanta is made up of two words: 1) Ari, meaning enemies, and 2) hanta, meaning destroyer. Therefore, Arihanta means a destroyer of the enemies. These enemies are not people like you, me, or any animal, or plant, etc. These enemies are inner desires known as passions. These includes anger, ego, deception, and greed.

These are the internal enemies within us. Until we control our passions, the real nature or the power of our soul will not be realized or manifested. When a person (soul) wins over these inner enemies he/she is called Arihanta. When that happens, the person has destroyed the four ghati karmas namely Jnanavarniya (knowledge blocking) Karma, Darshanavarniya (perception blocking) Karma, Mohniya (passion causing) Karma and Antaraya (obstacle causing) Karma.

These karmas are called ghati karmas because they directly affect the true nature of the soul. Arihanta attains: 1) Kevaljnan, perfect knowledge due to the destruction of all Jnanavarniya Karmas, 2) Kevaldarshan, perfect perception due to the destruction of all Darshanavarniya karmas, 3) becomes passionless due to the

destruction of all Mohniya Karmas, and 4) gains infinite power due to the destruction of all Antaraya Karmas.

Complete knowledge and perception means they know and see everything everywhere that is happening now, that has happened in the past, and that will happen in the future. Arihantas are divided into two categories: Tirthankar and Ordinary. Tirthankaras are special Arihants because they revitalize the Jain Sangh (four-fold Jain Order) consisting of Sädhus, Sädhvis, Shrävaks (male householders), and Shrävikäs (female householders).

During every half time cycle, twenty-four persons like us rise to the level of Tirthankar. The first Tirthankar of our time period was Lord Rushabhdev, and the twenty-fourth and last Tirthankar was Lord Mahävira, who lived from 599 B. C. to 527 B. C. A Tirthankar is also called a Jinä. Jina means conqueror of passions. At the time of nirvän (liberated from the worldly existence), Arihanta sheds off the remaining four aghati karmas namely 1) Nam (physical structure forming) Karma, 2) Gotra (status forming) Karma, 3) Vedniya (pain and pleasure causing) Karma and 4) Ayushya (life span determining) Karma. These four karmas do not affect the true nature of the soul; therefore, they are called Aghati karmas. After attaining salvation these Arihants are called Siddhas.

Siddhas

Siddhas are the liberated souls. They are no longer among us because they have completely ended the cycle of birth and death. They have reached the ultimate highest state, salvation. They do not have any karmas, and they do not collect any new karmas. This state of true freedom is called Moksha. Siddhas are experiencing unobstructed bliss (eternal happiness). They have complete knowledge and perception and infinite power. They are formless and have no passions and therefore are free from all temptations.

Acharyas

The message of Jina, Lord Mahävira the last Tirthankara, is carried on by the Ächäryas. They are our spiritual leaders. The responsibility of the spiritual

welfare, but not social or economical welfare of the entire Jain Sangh, rests on the shoulders of the Ächäryas. Before reaching this state, one has to do in-depth study and achieve mastery of the Jain scriptures (Ägams). In addition to acquiring a high level of spiritual excellence, they have the ability to lead the monks and nuns. They know various languages with a sound knowledge of other philosophies and religions of the area and the world.

Upadhyayas

This title is given to those Sädhus who have acquired a special knowledge of the Ägams and philosophical systems. They teach Jain scriptures to sädhus and sädhvis.

Sadhus and sadhvis

When householders become detached from the worldly aspects of life and get the desire for spiritual uplift(and not worldly uplift), they give up their worldly lives and become sädhus (monk) or sädhvis (nun). A male person is called sädhu, and a female person is called sädhvi. Before becoming sädhus or sädhvis, a lay person must observe sädhus orto understand their life style and do religious studies.

When they feel confident that they will be able to live the life of a monk or a nun, then they inform the Ächärya that they are ready to become sadhu or sadhvi. If the Ächärya is convinced that they are ready and are capable of following the vows of sadhu or sadhvi, then he gives them Deekshä. Deeksha is initiation ceremony when a householders changes to a monk or a nun. At the time of Deekshä, the sadhu or sadhvi voluntarily accepts to obey following five major vows for the rest of his/her life:

1. Commitment of Total Ahimsä (non-violence)-not to commit any type of violence.
2. Commitment of Total Satya (truth)-not to indulge in any type of lie or falsehood.
3. Commitment of Total Asteya (non-stealing)-not to take anything unless it is given.

4. Commitment of Total Brahmacharya (celibacy)-not to indulge in any sensual. activities
5. Commitment of Total Aparigraha (non-possessiveness)-not to acquire more than what is needed to maintain day to day life.

Some other things they observe are:

1. They do not accept the food cooked specially for them;
2. They do not eat before sunrise or after sunset;
3. They drink boiled water;
4. They walk bare footed and do not sit in a car, train, airplane or any other vehicle;
5. They do not stay in one place for a longer time;
6. They do not touch any person of the opposite sex even the children of opposite sex;
7. They do not get involved in social or society affairs;
8. Some monks wear no clothes while others wear white clothes;
9. All nuns wear white clothes;
10. They offer spiritual guidance to us, Self-discipline and purity is the part of their daily life.

That is why Jain monks and nuns are unique. Their activities are directed towards the uplift of their souls to Paramätman (the state of liberation)

- **<u>Ashta Mangala (Eight Symbols)</u>**






Ashta Mangala :

The eight auspicious sacred symbols hold deep spiritual significance for Jains. According to spiritual command, every Jain has to draw these symbols with pure unbroken rice grains in front of the icon of Tirthankara before commencing his obeisance to the temple. While sitting in the sanctorum after worshipping the Bhagavan in a Jain Temple, these symbols attract positive energies.

The detailed study of the Asta mangala is found in Bhagavati Sutra, Kalpa Sutra, JAmbu deep, Agam, many more old texts in Prakrit language.Also the importance of Namokar manta is also seen in those texts.

Swastika

Swastika an auspicious symbol also known as sathia. It is customary to draw the swastika at the beginning of all religious ceremonies.

Shri Vatsa

Shri Vatsa an auspicious symbol on the upper chest of all 24 Tirthankaras showing compassionate universal eternal love for all living beings however minute they may be.

Nandavarta

Nandavarta a sacred complex form of swastika which is a visual icon for higher meditative attainment, a beautiful configuration formed by nine angles or corners of divinity.

Vardhamanaka

Varshamanaka an earthen bowl sealed with another earthen bowl and used as a lamp. This pair in Sanskrit is known as samput. The lit lamp is symbolic of light banishing darkness.

Bhadrasana

Bhadrasana a holy seat, the royal throne. Also regarded as the sacred seat for the liberated souls, this is a seat of honor for evolved souls.

Kalasha

Kalasha the holy pitcher with two divine eyes as well as two ends of a scarf drawn on either sides. This plays a prominent role in every auspicious ceremony.

Meen Yugala (Fish Couple)

Meen Yugula the fish couple. The form of the fish is considered divine, as it also shows the flow of divine life in the cosmic ocean.

Darpana (Mirror)

The mirror reflects one's true self because of its clarity

The eight pious symbols of meditation and holistic inner body meditation with divine super prayers It is said that When a lady is pregnant, she is never alone in her thoughts. A mother has to think twice , once for herself and once for her child. Ayushya Karma is the most important of 8 karmas .This is the only karma that canot be changed in any circumstances. Once the aayushya karma of the soul is decided it cannot be changed.

Aayushya karma can be in the form of:

►Tiryanch(all the living organisms in the air , water or land)

►Devlok(heaven)

► Naraki(hell)

►Manushya (human being)

The aayushya karma of the soul is decided by good thoughts and good upbringing of the mother. The aayushya karma can be decided by self or mother can decide if the being is in the mother's womb and is dependent on the mother . Good thoughts lead to good aayushya karma and bad thoughts lead to a reversal in action. The aayushya karma cannot be changed once it's decided

The aayushya karma is decided after the ¾ th life span is over. The mother should be in position to make out as soon as the soul enters her womb without waiting for the symptoms of pregnancy . she shoul be cautious and figure out the soul's entry into her. Once she gets to know to know the soul has entered her body, she needs to do meditation. This meditation helps the soul to settle down by maintaining harmony and not changing the environment from which the soul has come in.

➢ Patient's Consent Form

TO STUDY ROLE OF SHUSHRUTOKTA GARBHINI REGIMEN IN MISCARRIAGE UPTO 20 WKS.

I, the undersigned Mr/Mrs/Ms _____

Residing at _____

Tel. No.Res. Office : Mobile No.:

Age: yrs Sex : Male/Female Profession :

Dr. Supriya Gugale has informed me regarding the above said study project. The doctor has explained to me the action of Sushrutokta regimen for preventing pregnancy loss & I have understood it. I am willingly participating in the above study project for the period of three months. It is not mandatory for me to continue upt0 20 wks & I am free to leave the project in between. Also it is informed to me that the information gathered from me will be kept confidential but the data collected can be used for any research work & can be published out & I don't have any objection to it. The doctor has not made any assurances regarding the benefits of the cure from this trial. I fully give my consent to this declaration. I am signing as below

Patients Name Witness:

Mr/Mrs/Ms Mr/Mrs/Ms

Signature Signature

Date Date

Place Place

- **<u>Case Assessment Proforma</u>**:

Date.

TOPIC : - TO STUDY ROLE OF SUSHRUTOKTA GARBHINI REGIMEN IN MISCARRIAGE UPTO 20 WKS.

TILAK MAHARASHTRA UNIVERSITY, PUNE

Research by : - Vaidya. Supriya Gugale

Guide : - Vaidya. Suhas Herlekar

PATIENT DETAILS-

Name :
…….....
.....

Age. ……. Occupation:……Wt. …….. Religion
...…….....

Adress:……..
…….....

…… Contact No.
…….…….....

Consent : Yes / No……. LMP:…….....……
…….....

Allergies (As told by the patient)

…….....…….
.....

Menstrual History : Present M. H. …….....……..…. Past M. H.
…….....

1. OBSTERIC HISTORY:

E.D.D. (By date) **E.D.D. (By USG)**

- **High Risk Factor -** £ Caesarean Section £ Bad Obstetric History £ Infertility
  £ Downs Syndrome £ Congenital Anomalies
  £ Forcep/Vaccum delivery
  £ Blood Trans. £ Tobacco £ Alcohol
  £ Radiation Exposure £ Rh. Negative
  £ Any Other

Medical History & Present Medication

.....

.....

.....

- **Surgical History :**

  .....

- **Past History :**

  £ Diabetes £ Hypertension £ Tuberculosis £ Hepatitis
  £ Asthama £ Thyroid £ Heart Disease
  £ Any Other

- **Personal History :**

  £ Smoking £ Tobacco £ Drinking
  £ Exposure £ Misri £ Contact Lenses
  £ Dentures £ Any Other

- **Family History :**

  £ Diabetes £ Hypertension £ Heart Disease
  £ Twins £ Congenital anomalies
  £Asthama £ Tuberculosis £ Any other

2. INVESTIGATIONS:

Date : Hb: Blood Group:

BSL: HIV: VDRL: Au/Ag: Urine:

BT/CT: Creatinine: Urea: TSH:

3. USG REPORTS:

1st (6 Weeks) _____

2nd (14 Weeks) _____

3rd (20 Weeks)_____

4. GENERAL CONDITION:

Weight: B.P.: RR: Anaemia/Pallor

Oedema: Jaundice: CVS: Urine Albumin:

- **Present complaints**:

…….....
.....……
.....……
…….....

- **Eight kinds of examination**

A. Pulse

B. Stool

C. Urine

D. Tongue

E.Shabda

F.Sparsh

G.Druk

H. Akruti

- **General Examination :**

a. Nails:

b. Teeth:

c. Body temp. :

- **Abdominal examination :**

Uterine height:

FHS:

Per vaginal examination:

Discharge:

- **Ahar - past /present**

Appetite -

Timings :

- **Diet Details :**

Quantity Frequency. **Quantity Frequency.**

Stale Food _____

Use of Fridge _____

Opposite Food

a) Milkshakes _____

b) Mung Khichadi + Milk _____

c) Fish + Milk _____

Fasting

1) Sabudana_____

2) Potato _____

Hoteling

1) Punjabi _____

2) Chinese _____

3) Wada-Pav, Pani-puri _____

Milk _____

Milk Prod. _____

Papad _____

Achar _____

Bakery Prod. _____

Non Veg. _____

Cold Drinks _____

Tea _____

Coffee _____

- **Vihar: Past /Present**

Daily Routine _____

Excerise _____

Schedule of Work _____

Mode of Work _____

Vehicle Travelling _____

Running Walking _____

- **AacharPast /Present**

Comp. Work _____

Supperession of natural urges _____

Coitus _____

Sleep _____

Dreams _____

History of Trauma by Weapons/Stones _____

History of Fall from height _____

- **Psychological Aspects Past Present**

Anger _____

Fear _____

Jealousy _____

Environment in the house (friendly/stressful/Any specific)_____

_____

5. **FOLLOW UP :**

- **Methods-**

While working in Tanushree Garbhsanskar Kendra, it was observed that in this era of fast life , people wish to have healthy smart and intelligent child. The complete care to be given to the pregnant lady is the basic need of the obstetrician. And for the lady who has history of pregnancy loss needs not only treatment for healthy pregnancy but also for her mental stability. So to study the role Sushrutokta Regimen in miscarriage upto 20 wks at Tanushree Garbhsanskar Kendra was decided.

So **randomized selection** of the pregnant mothers with the history of miscarriages were done and consented for the study .The paients who gave consent were distributed in two groups.

Control group- Group of 100 pregnant mothers treated with normal antenatal care with modern medicines.

Drug group- the trial or study group 100 pregnant mothers treated with Sushrutokta Regimen.

Meditation group- In this group 30 more patients were treated with Sushrutokta regimen and Ashta Mangala Dhyan.(meditation)

The patients were distributed randomly either in control group or Sushrutokta Garbhini Regimen. More than 200 patients were registered for the present study in view of possible drop out cases. 30 patients added more with the Sushrutokta Garbhini Regimen and given Jain Darshan meditation with the Sushrutokta regimen. The duration of the study was upto 20 wks.

The study was carried out in 3 phases

1) Detail review of patients
2) Administration of drug and ahar and day to day behaviour under different experimental conditions
3) Follow-up of patients

On day 1 the accepted patients signed a formal written consent form in the presence of a witness and they were examined physically as a routine. The

pregnancy was accessed on the basis of physical examination as well as the sonographic report and the foetal age was fixed. A detailed previous history was taken down in the patient's own words. This was followed by physical examination including abdominal examination and per vaginal examination. Examination with a speculum was also undertaken as and when necessary. The clinical diagnosis was folloed by the special examination like Sonography and hormonal pregnancy tests as required. Routine

Examination of blood and urine was ordered. Blood examinations included Clotting and bleeding tests, erythrocytes sedimentation rate (ESR), blood group determination, Total RBC and WBC counts, haemoglobin estimation, HIV tests. In case of doubt some special investigations were undertaken for suspected TB infection, cancer uterus, polycystic overies, uterine fibroids etc. The aborted material was sent to the pathologist for confirmation of causes of pregnancy loss.

A detailed enquiry was made into the daily diet and activity during wakeful, day time. Corrective instructions were issued to all the patients for diet and food.

Being under tension and fear of pregnancy loss all the patients received assurance on the first day of visit. For all the patients special councelling was organized and according to the needs of each and every participant they were assured on the outcome of the pregnancy state till it was assessed that the patient and the family members were satisfied. Each patient was assured and educated regarding preservation of foetus and prevention of pregnancy loss. They were adequately briefed regarding the daily rituals, diet, rest and calming of mind. The family members, especially the husband was asked to look after her and behave in a gentle manner.

Rest was advised and emphasized for both day and night. Lifting of heavy objects was totally forbidden. Avoidance of debate, arguments and speaking in a raised voice was emphasized to all the patients.

Importance of attending the pre decided appointments punctually and avoiding absentees was told to all the patients. The instructions were given to all the patients in the local language. and it was ascertained that they understood the instructions very well.

On the first day general information of each patient was entered into a specially prepared case paper and all the details were entered on subsequent visits. Arrangements were also kept ready in case the pregnancy loss becomes inevitable and evacuation of uterus becomes necessary.

Patients received the Sushrutokta Garbhini Regimen for all the patients upto the completion of the viable age of the foetus i.e. up to the completion of the 20 weeks, irrespective of the pregnancy month. Thus, patients who have been accepted in the earlier months viz. 1st month of pregnancy received the Sushrutkta Gabhini Regimen for longer time and had better chances of avoiding the pregnancy loss. No patients beyond 20 weeks of pregnancy (5 months) were accepted for the present study. A pain assessment criterion was Happy face scale.

Administration of Drugs:

1. Dose of the drug: Masanumas tabs were given in the dose of two tabs .

2. Timings: it was given twice daily – in the morning with milk after breakfast and in the evening.

3. Duration: The drug was given 3 months regularly.

The Masanumas tabs were prepared from Rajson Pharma, Nasik and necessary certification was obtained. Also the necessary chemical and microbial analysis of the Masanumas tabs was done and certification obtained.

The control group patients received modern medicines in the form of hormones, antibiotics if needed, styptic agents and counseling if indicated.

Generally all the patients were asked to visit every 15th day or earlier if need be. All the patients were asked to be in contact with the student author in case they need any help or in case of doubts or if there is any kind of emergency. Thus vigilance was kept in the form of frequent telephonic contact and bi-monthly regular visits.

Few patients required in-patient care and they were admitted for a couple of days for observation. In-patients were visited morning and evening as a hospital routine activity.

Patients from the Sushrutokta Garbhini Regimen were asked to strictly follow the dietary regimen advised by Sushruta as follows:

1st Month : Cow's cold milk 300 ml sip by sip (Muhur Muhu)

2nd Month : Same as above continued plus pathyakara liquid diet.

3rd Month : All above plus cooked rice prepared from "Shali Shashtik" (paddy grown in 60 days) and Cow's milk.

4th Month : Even though meat of edible wild animals is advised by Sushrut, in the present sudy this was omitted totally. The patients were advised to continue the diet as prescribed for 3rd month.

5th Month : Items mentioned above plus the addition of "Ksheera-Sarpi" (a mixture of equal quantities of milk and Cow's ghee). This mixture was administered in small quantities according to the digestive powder and Garbhini's desire.

The quantity of the above items depended on the "Jarana Shakti" (digestive powder of Garbhini which in turn was assessed by previous dietary history and examination of stools for indigested diet.

1st month	Cow's cold milk 300 ml sip by sip
2nd month	pathyakara liquid diet.
3rd month	Sali-sastik rice +cow milk
4th month	As per 3rd month
5th month	Ksheera-Sarpi" (a mixture of equal quantities of milk and Cow's ghee).

- **Study Design:**

Randomize drug control study design

▼

Randomization Group Control and Drug

▼

Initial assessment (on day 0)

▼

Modern antenatal care to the control group

Sushrutokta regimen to drug group

Sushrutokta regimen + Ashta mangal Dhyan to meditation group

▼

Assesment at the end of 6,10,15,20 wks.

▼

Data collection and processing

▼

Statastical analysis

▼

Observations

▼

Conclusions

Clinical study

One hundred patients were taken for clinical study of sushrutokta regimen and thirty meditation group. Total time duration upto 20 wks was undertaken and first three follow ups after 15 days and after that after a month of the patient were taken.

The patient were examined and the record is maintained as per the standard proforma given below :

OBSERVATIONS:

Following observations can be derived from the clinical and therotical study of the Pregnancy Loss:

1. Miscarriage is very sensitive topic so needs very perfect and proper management.
2. When the old texts are studied , the perfect description in management is seen.
3. The Garbhopghatkar Bhavas described in different samhitas are still applicable in present era and plays important role in the management.
4. The detail description of Diet ,(Ahar) and Day to day behavior really gives perfect path to the pregnant mothers.
5. Meditation, a way of relaxation physical , mental and spiritual also a way of treating the pregnant mother.

OBSERVATIONS PERTAINING TO THE STUDY

Total 100 patients were randomly selected for the study and divided into 2 groups –

Drug Group (Susrutokta Regimen Group)-trial group of 100 patients treated with Sushrutokta Garbhinr Paricharya.

Control Group – control group of 100 patients treated with Modern Antenatal group.

Patient were observed thoroughly and noted neatly. The observations were recorded and necessary charts and graphs were made.

GENERAL OBSERVATION

1. Age wise:

Though the inclusion factor for the age in both the groups is in between 20 to 40 years, maximum patients were in between the age of 25 to 35 years. The average age for control group is 28years as compared to drug group 28 years. This is the age when maximum females are having lots of family , carrier stresses.

2.Location wise :

Out of 200 patients, almost all staying in the area of 5 km. from the Tanushree Garbhsanskar Kendra. The study was conducted in urban area as the pregnanacy loss is very much common in urban areas as females having fast life style.

3. Occupation wise : .

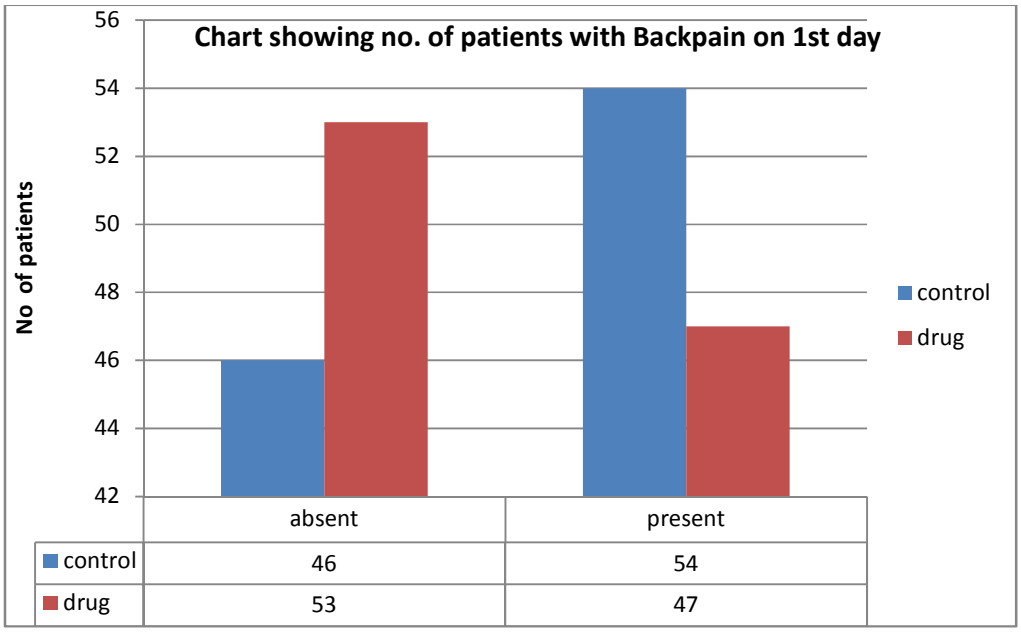
Occupation wise 89 patients were from service, 47 patients (26.66%) were from business, 64 patients were housewives,

4.Aahara Viharaja Hetu wise :

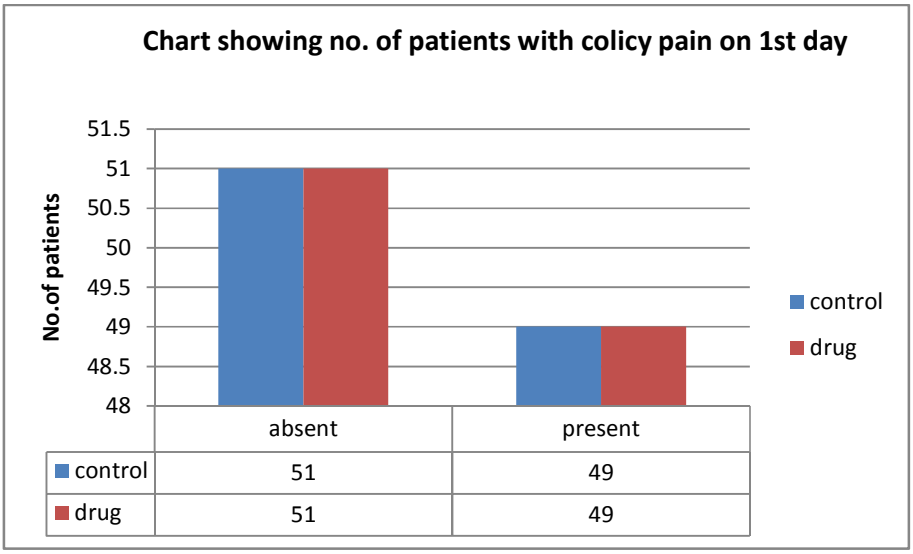
Lots of emotional break ups, lack of exercise, Spicy and outside junk foods ,lots of physical stress. were found to be main aetiological factors in almost all the patients

CLINICAL OBSERVATIONS

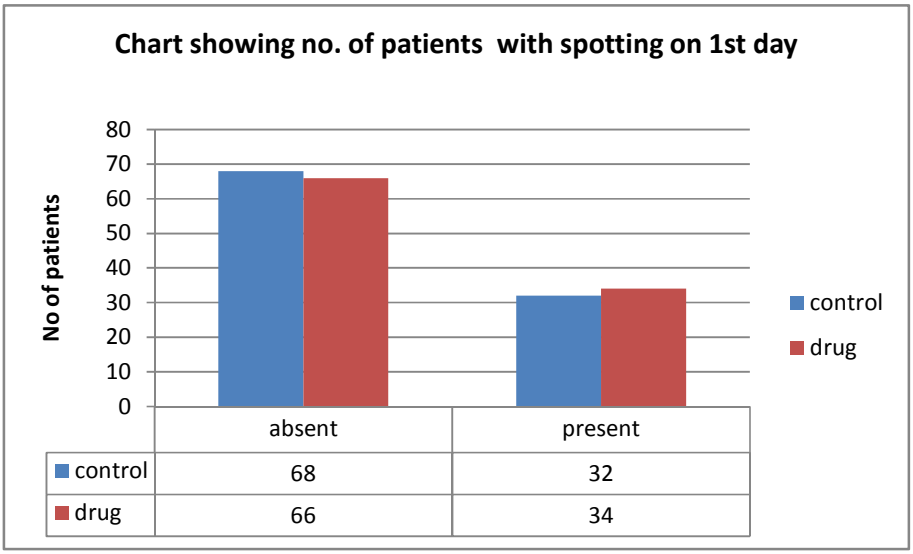
All the clinical observations of the patients are shown in graphical ways as follows:



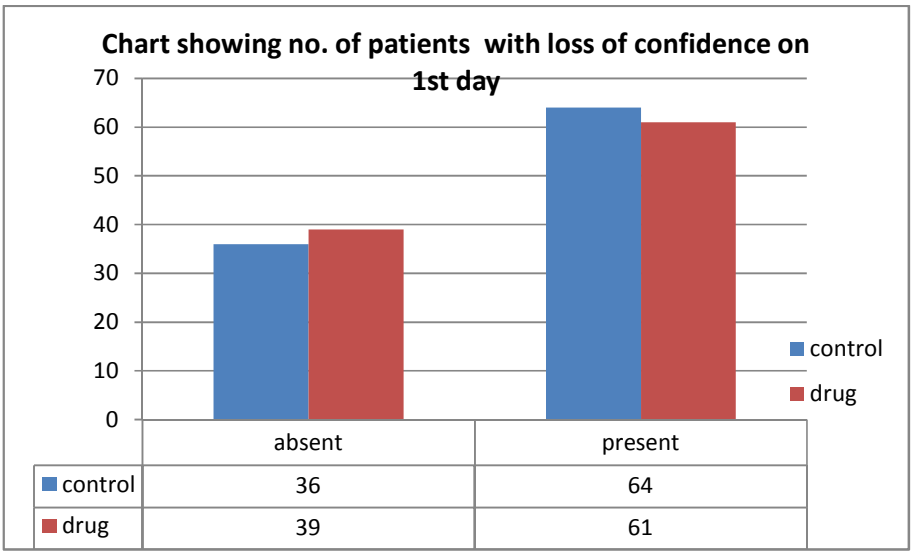
Charts showing the information of patients complaining of Backache on Day 1



Charts showing the information of patients complaining of Colicy pain on Day 1

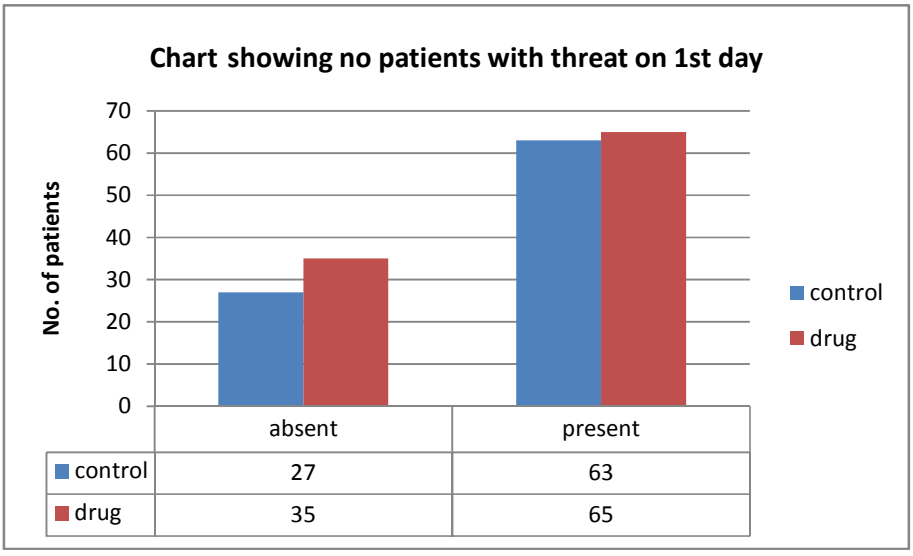


Charts showing the information of patients complaining of Spotting on Day 1



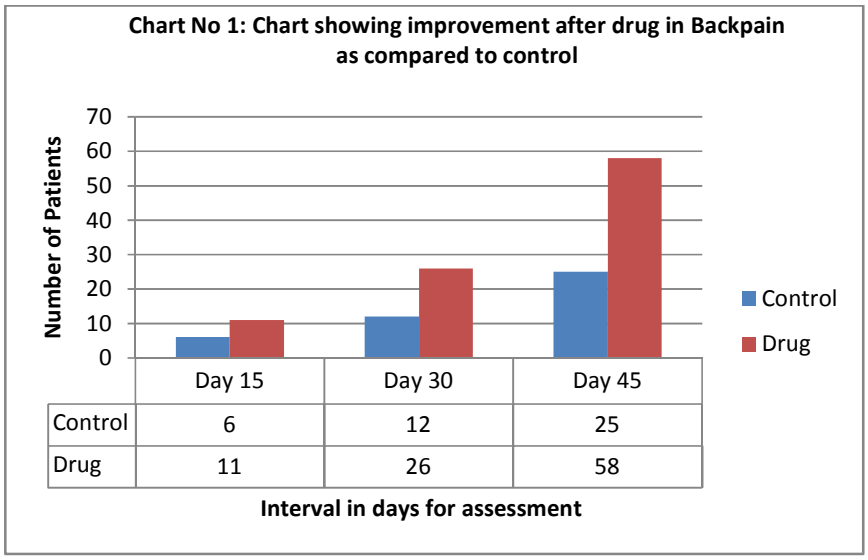
Charts showing the information of patients

complaining of Loss of confidence on Day 1



Charts showing the information of patients complaining of Threat on Day 1

RESULTS :



Charts showing the progress with drug group,

Chart No 1

Shows the improvement in backpain of the patients from control and drug treated groups. Improvement is observed in both the groups with a difference that in drug treated groups patients recovered from backpain faster. The assessment was conducted on day 15th and day 30th 45th in both the groups. At the end of day 15 and day 30th 45th revovery is almost double than that in the control group. The drug gives quicker relief as compared to control treatment.

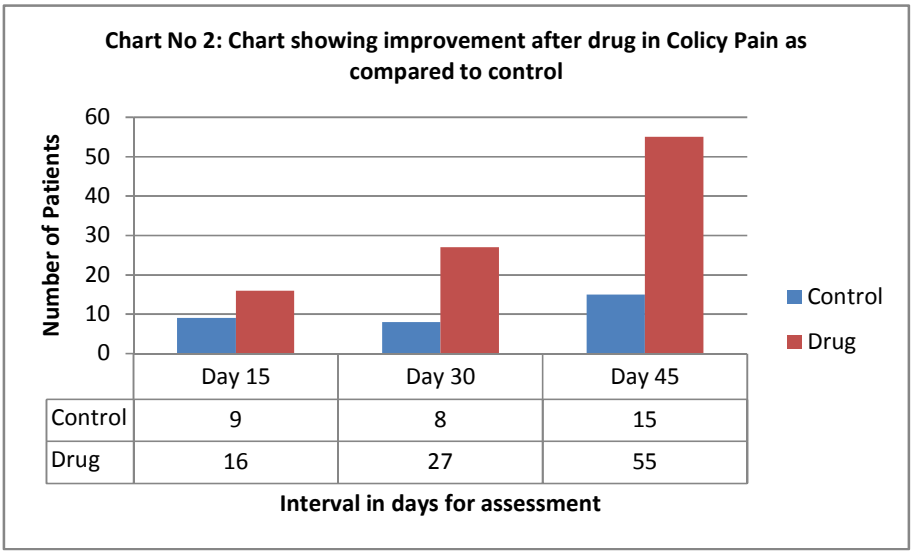


Chart No 2:

shows the improvement in Colicy pain of the patients from control and drug treated groups. Improvement is observed in both the groups with a difference that in drug treated groups patients recovered from Colicy pain faster. The assessment was conducted on day 15th and day 30th 45th in both the groups. At the end of day 15 and day 30th 45th recovery is almost four times more than that in the control group. The drug gives quicker relief as compared to control treatment.

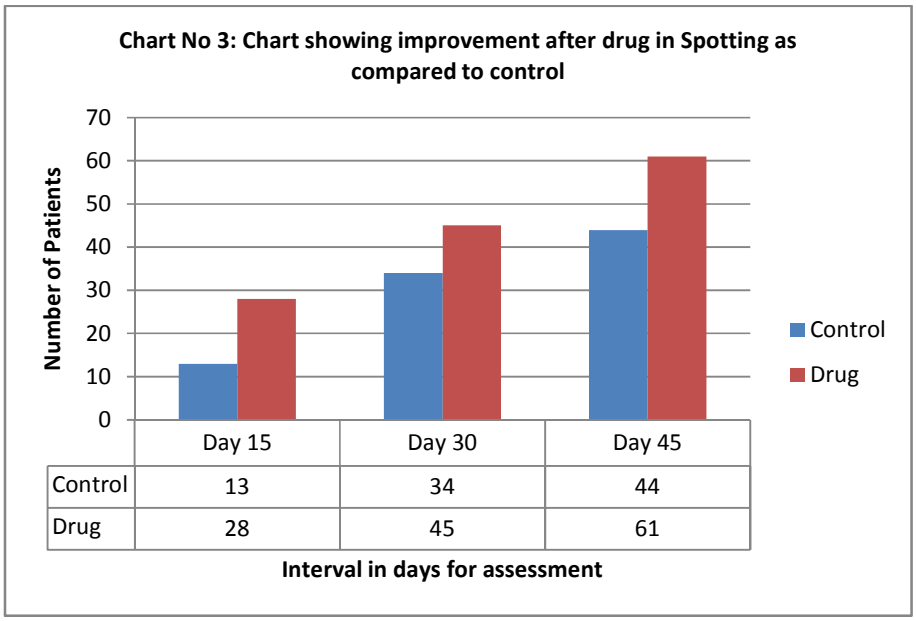


Chart No 3:

shows the improvement in Spotting of the patients from control and drug treated groups. Improvement is observed in both the groups with a difference that in drug treated groups patients recovered from Spotting more fast. The assessment was conducted on day 15th and day 30^{th,} 45th both the groups. At the end of day 15 and day 30th 45th recovery is marginal but quite noticeable than that in the control group. The drug gives more relief as compared to control treatment.

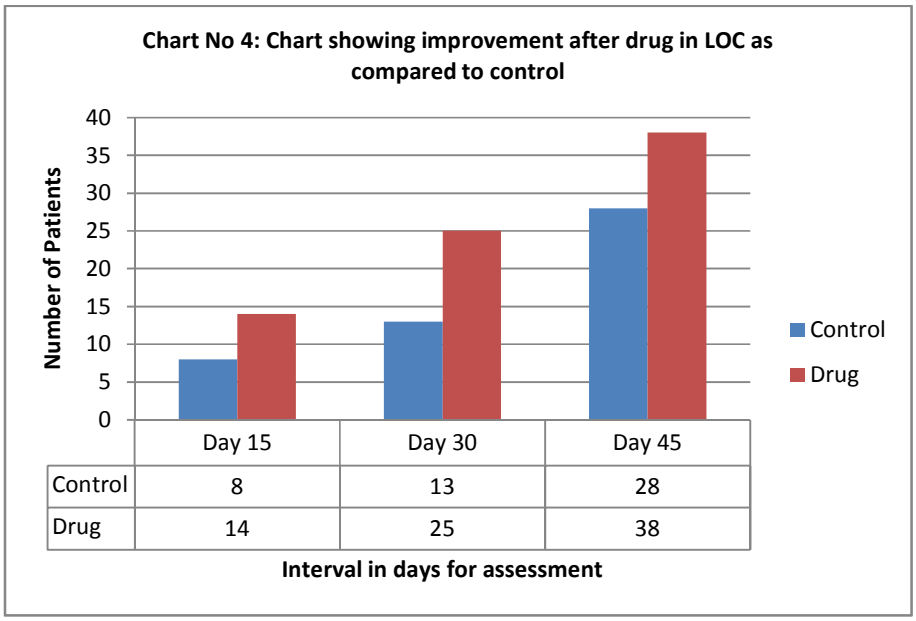


Chart No 4:

Shows the improvement in LOC (Loss of confidence)of the patients from control and drug treated groups. Improvement is observed in both the groups with a difference that in drug treated groups patients recovered from LOC faster. The assessment was conducted on day 15^{th} and day 30^{th} , 45^{th} in both the groups. At the end of day 15 and day 30^{th} 45^{th} recovery is good as compared to the control group. The drug gives appreciable relief as compared to control treatment

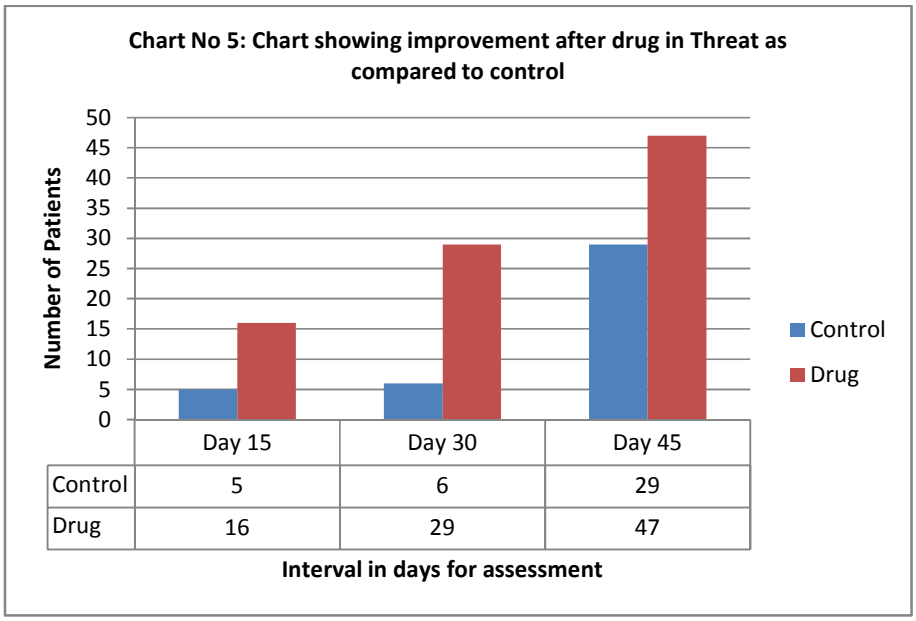


Chart No 5:

Shows the improvement in Threat of the patients from control and drug treated groups. Improvement is observed in both the groups with a difference that in drug treated groups patients recovered from Threat faster. The assessment was conducted on day 15th and day 30th 45th in both the groups. At the end of day 15 and day 30th 45th recovery is good as compared to the control group. The drug gives appreciable relief as compared to control treatment.

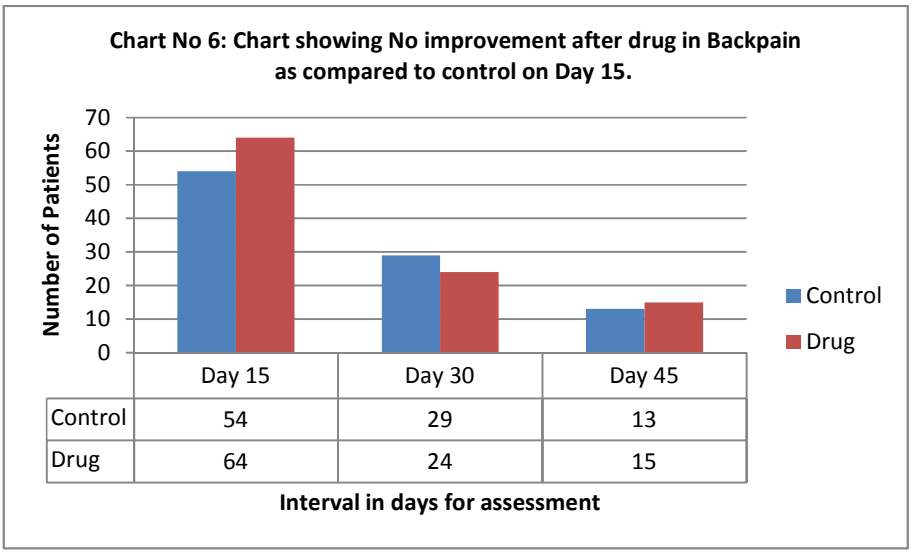


Chart No 6: shows No improvement in Backpain of the patients from control and drug treated groups. Improvement was NOT observed in control group. No improvement incidence in drug treated group was found to be low. The assessment was conducted on day 15th and day 30th in both the groups. At the end of day 15 and day 30th 45th incidence of No Improvement was progressively low as compared to the control group.

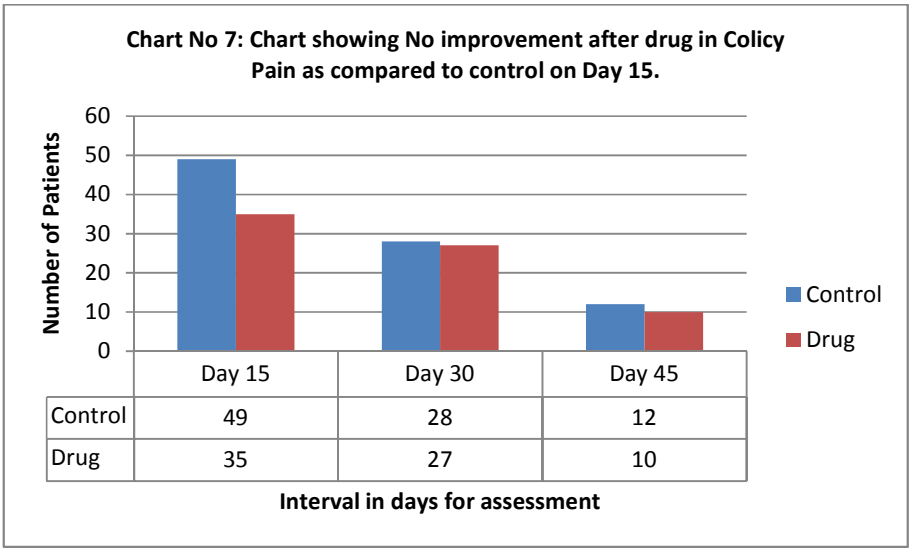


Chart No 7: shows No improvement in Colicky Pain of the patients from control and drug treated groups. Improvement was NOT observed in control group. No improvement incidence in drug treated group was found to be low. The assessment was conducted on day 15th and day 30th in both the groups. At the end of day 15 and

day 30th 45th incidence of No Improvement was progressively low as compared to the control group.

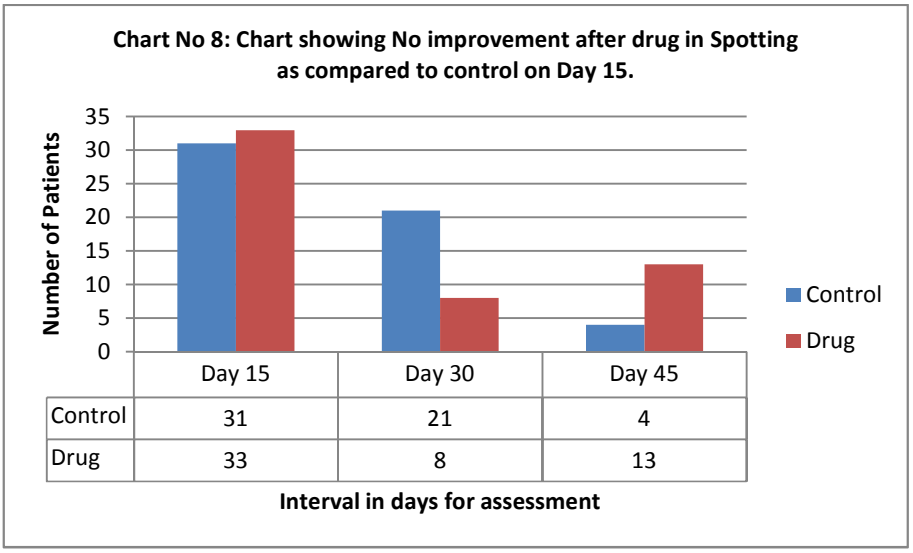


Chart No 8: shows No improvement in Spotting of the patients from control and drug treated groups. Improvement was erratic in drug group. No improvement incidence in drug treated group was found to be low at the end of 15th day. But it was more at the end of 30th day. At the end of day 30th incidence of No Improvement was unexpected and was more in comparison to control.

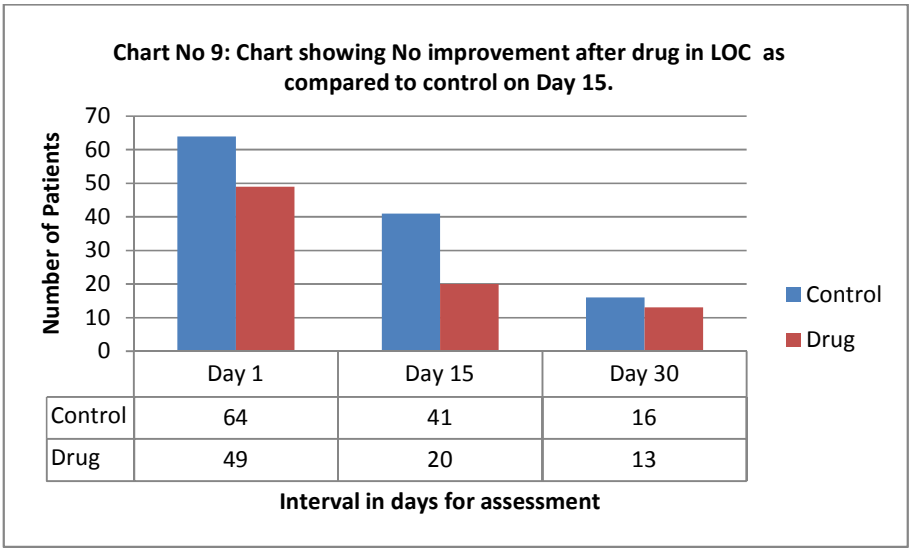


Chart No 9: shows No improvement in LOC of the patients from control and drug treated groups. Improvement was NOT observed in control group. No improvement incidence in drug treated group was found to be low and progressive. The assessment was conducted on day 15th and day 30th, 45th in both the groups.

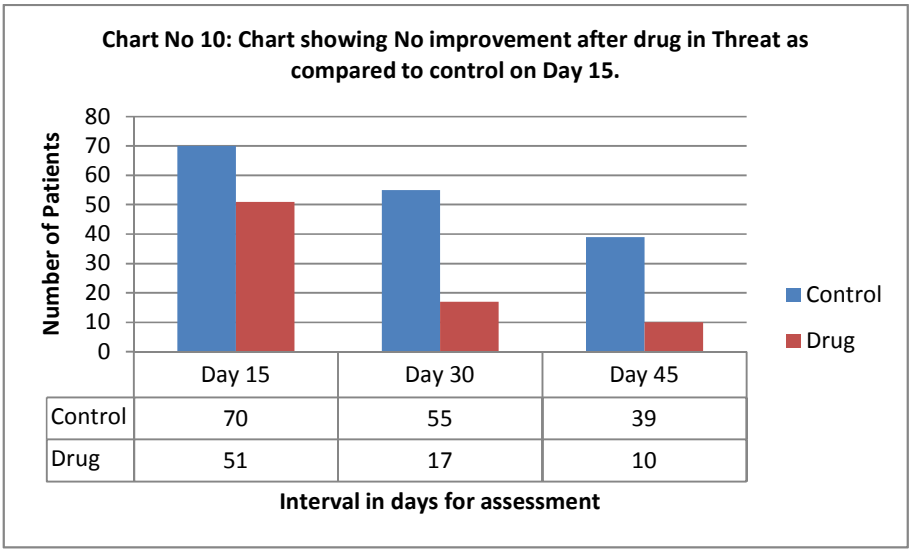


Chart No 10: shows No improvement in Threat of the patients from control and drug treated groups. Improvement was NOT observed in control group. No improvement incidence in drug treated group was found to be low and progressive. The assessment was conducted on day 15th and day 30th in both the groups.

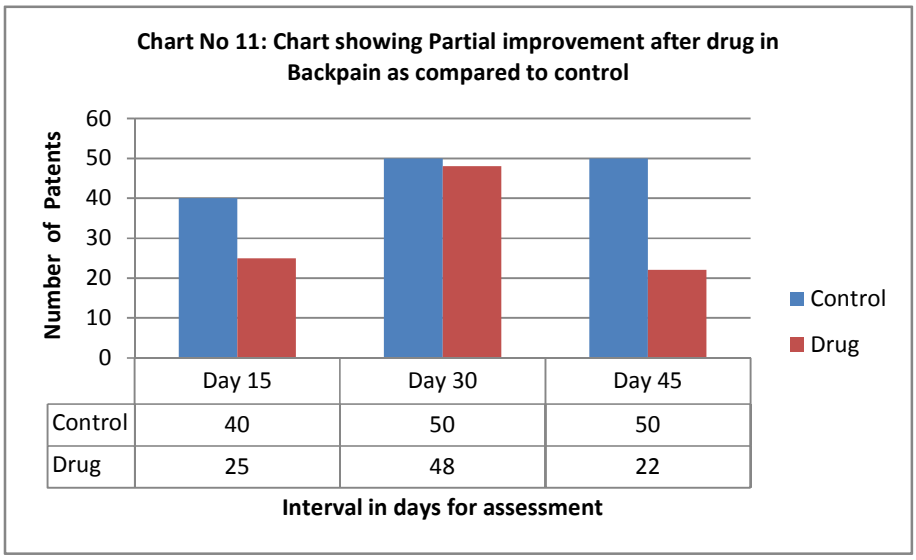


Chart No 11:

This chart explains partial improvement in symptom (Bachache) at the end of 45 days.

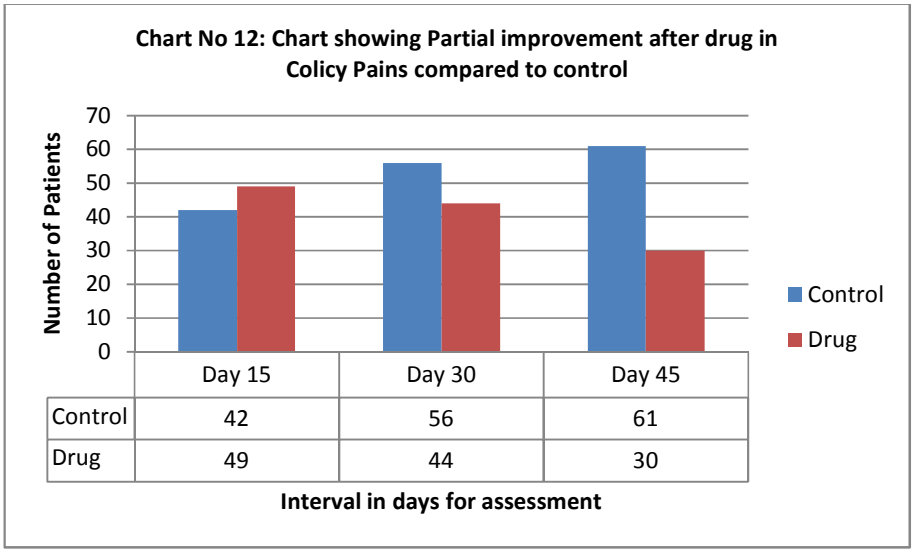


Chart No 12:

This chart explains partial improvement in symptom (Colicy pain) at the end of 45 days.

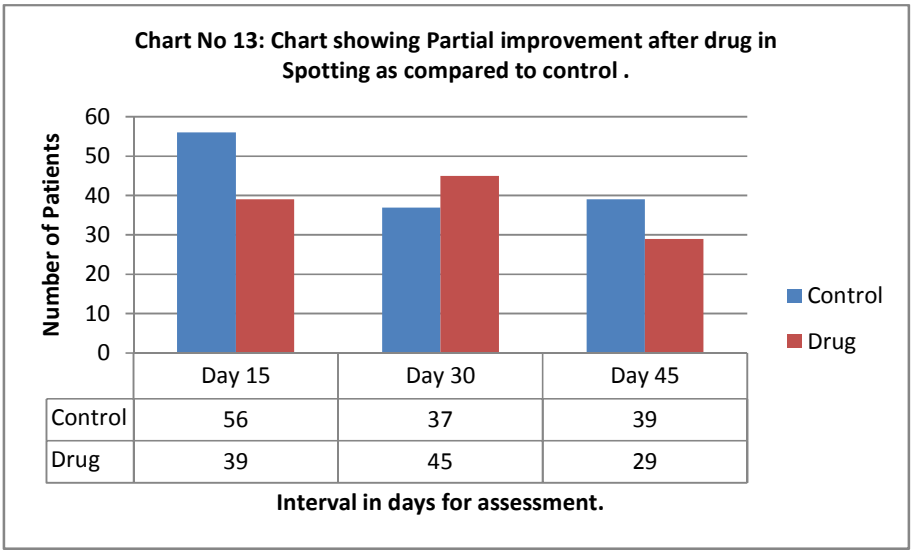


Chart No 13:

This chart explains partial improvement in symptom (spotting) at the end of 45 days.

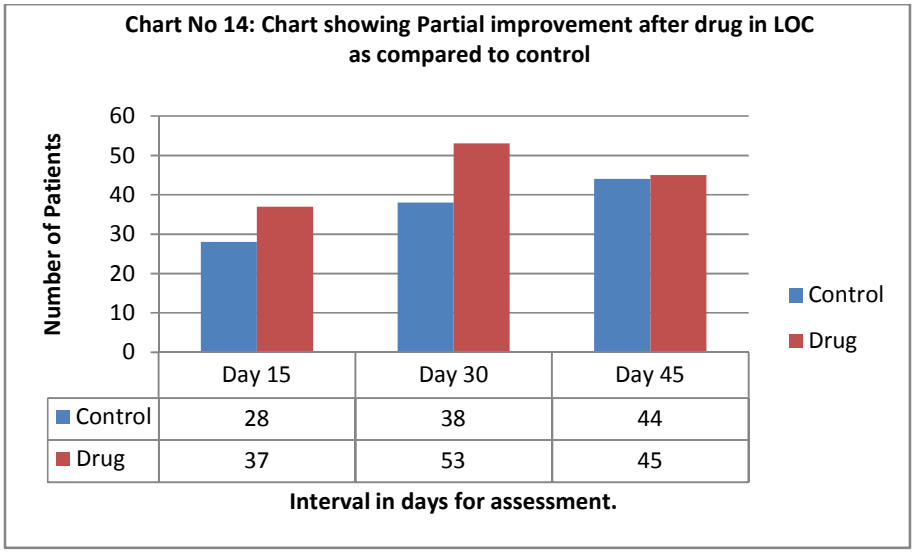


Chart No 14:

Shows partial improvement in LOC. Encouraging results were obtained in drug treated group. The control of LOC in drug group was satisfactory as compared to control group. The assessment was conducted on day 15th and day 30th in both the groups. At the end of 45 days.

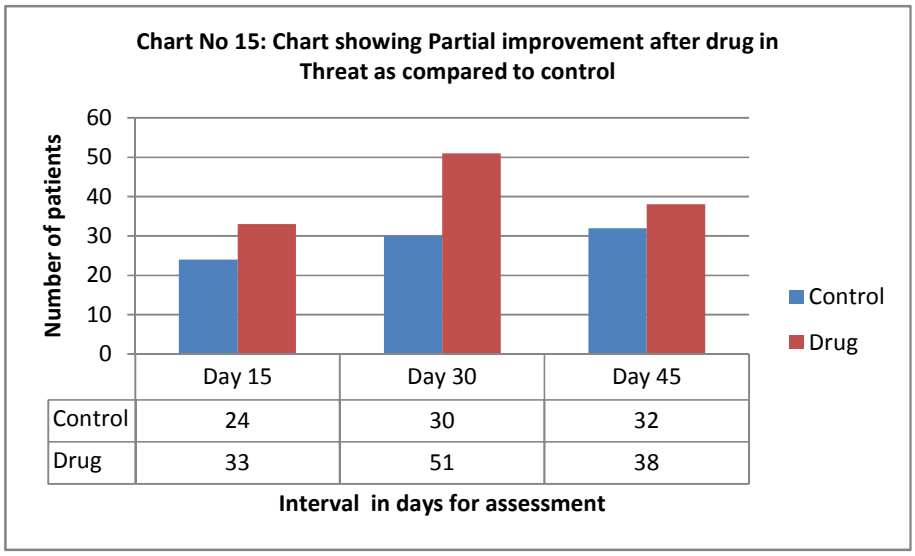
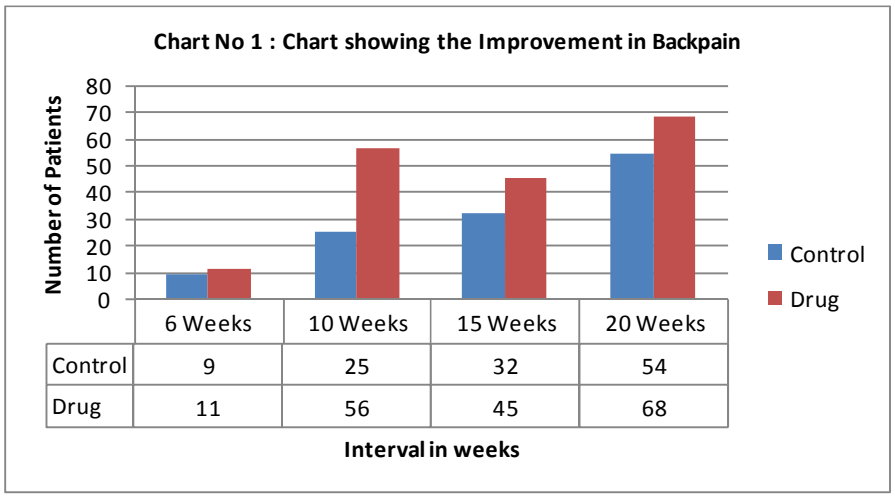
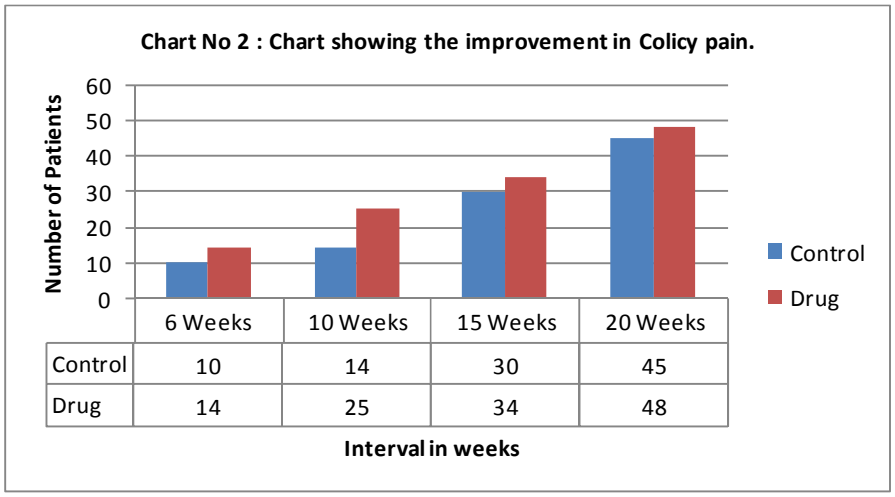


Chart No 15:

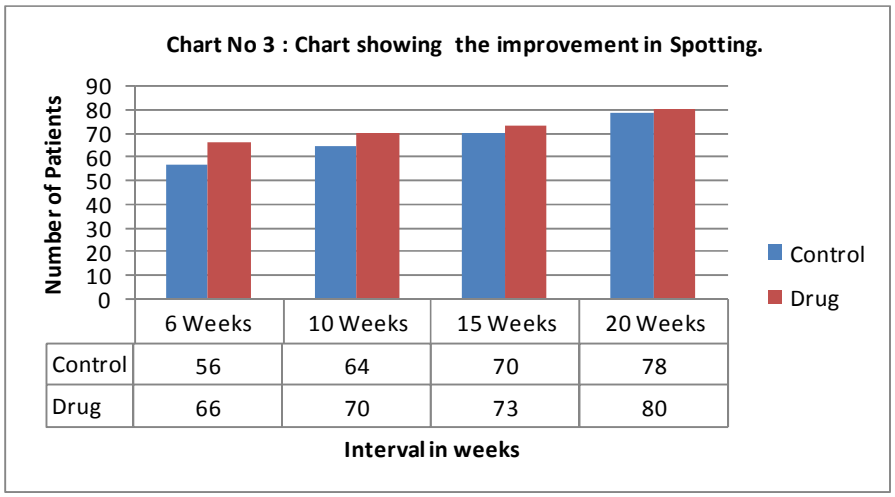
Shows improvement in Threat. Results show that incidence of Threat in drug and control groups is comparable. But overall the results were found to be erratic.



Interpretation: This chart shows the improvement in Backpain on weekly basis. The drug treated group shows a very good improvement.

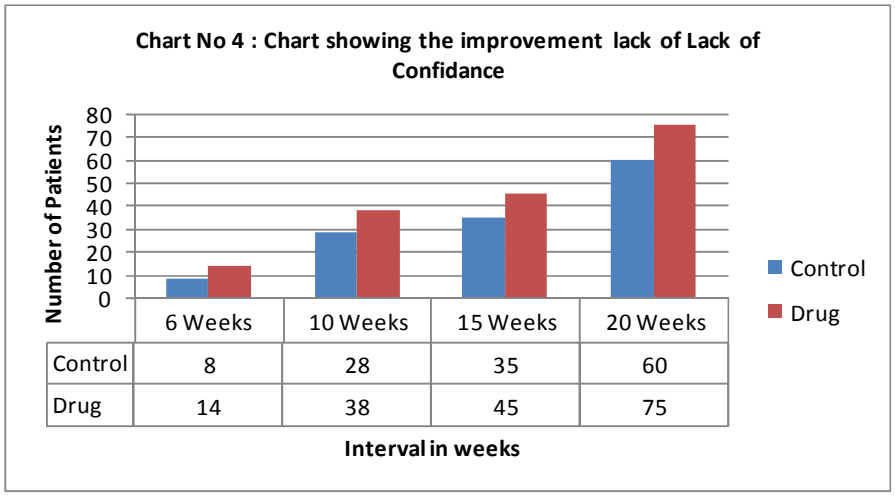


Interpretation: This chart shows the improvement in Colicy Pain on weekly basis. The drug treated group shows a very good improvement.



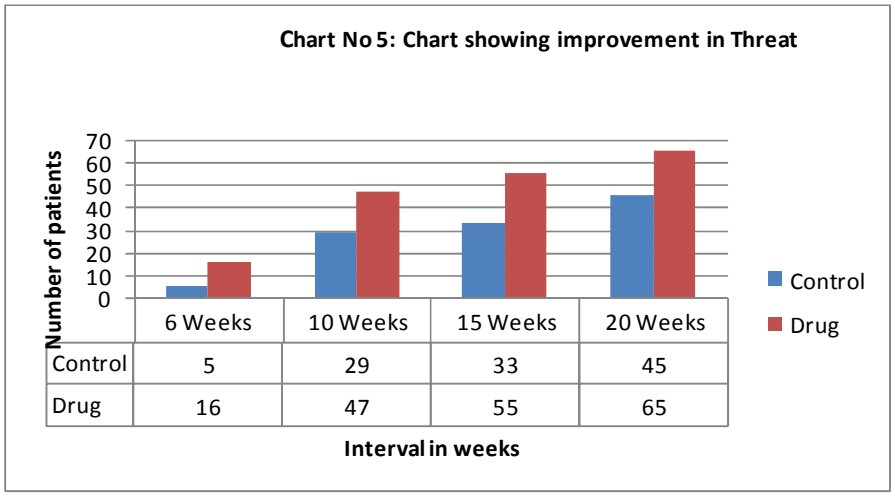
	6 Weeks	10 Weeks	15 Weeks	20 Weeks
Control	56	64	70	78
Drug	66	70	73	80

Interpretation: This chart shows the improvement in Spotting on weekly basis. The drug treated group shows a very good improvement. It should be noted that the control (modern treatment) shows equal level of improvement.

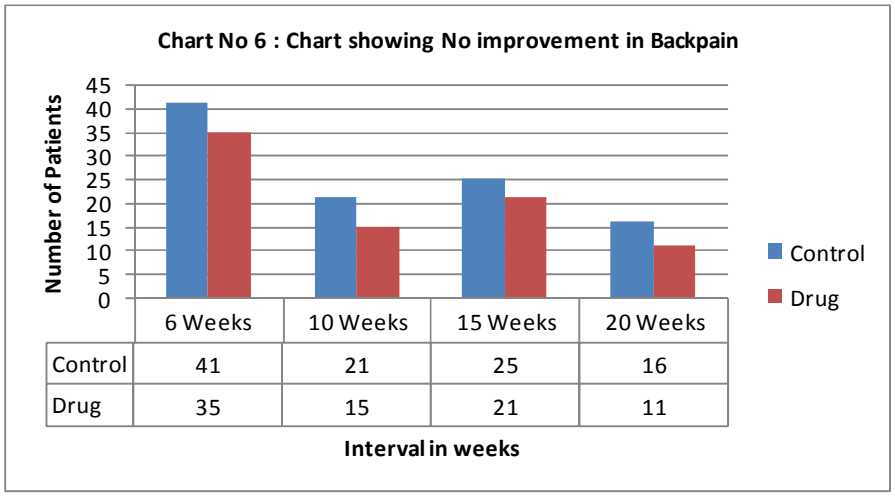


	6 Weeks	10 Weeks	15 Weeks	20 Weeks
Control	8	28	35	60
Drug	14	38	45	75

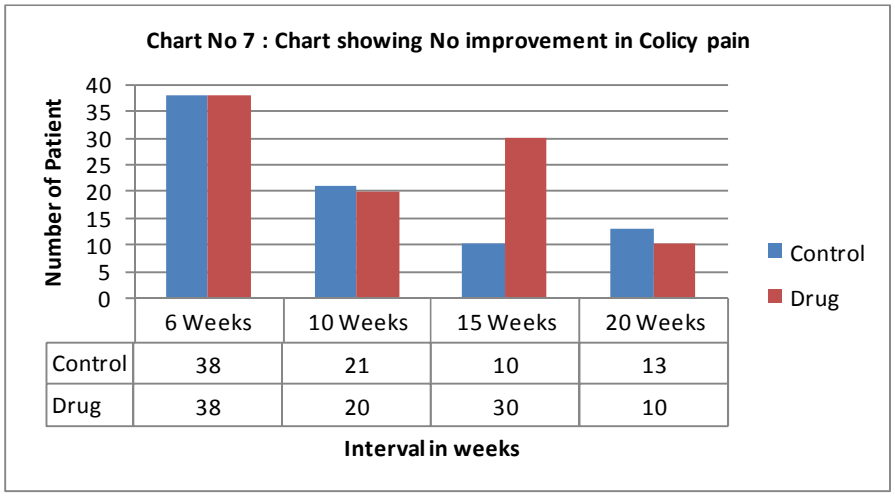
Interpretation: This chart shows the improvement in Lack of Confidence on weekly basis. The drug treated group shows a very good improvement.



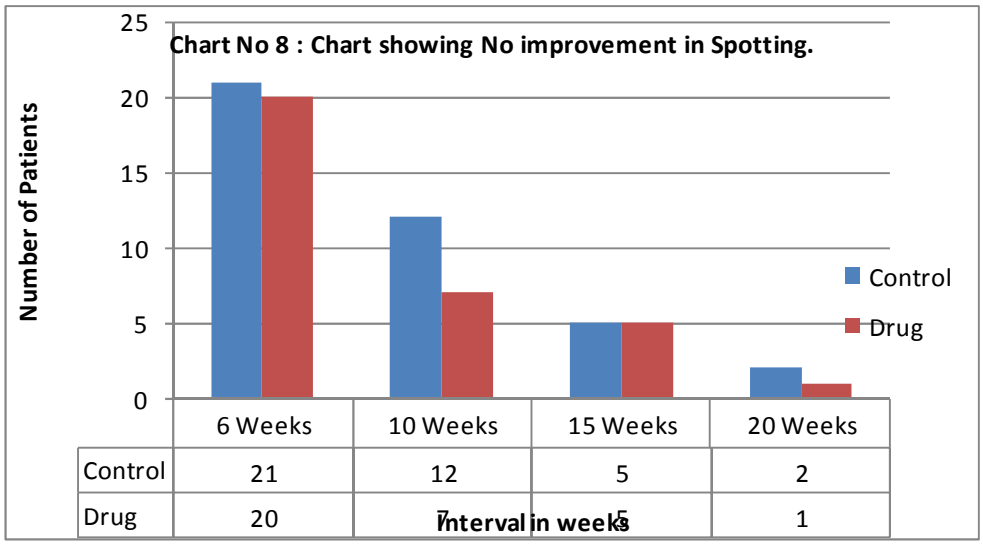
Interpretation: This chart shows the improvement in Threat on weekly basis. The drug treated group shows a very good improvement.



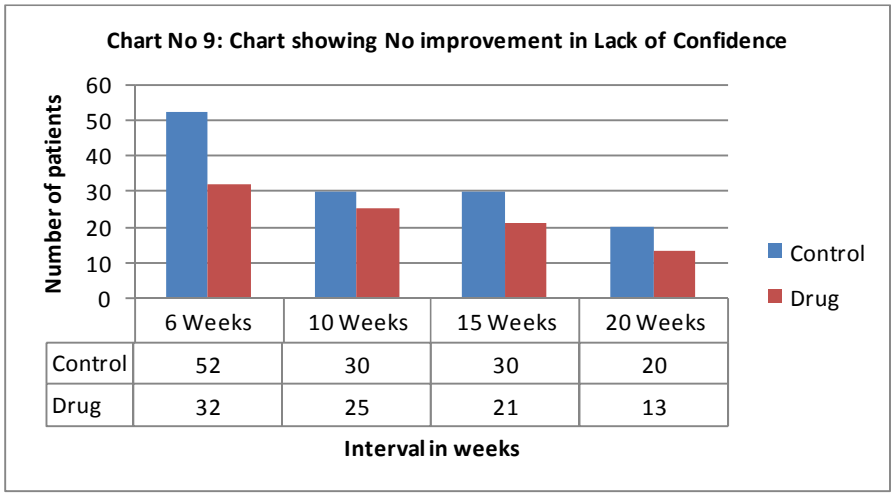
Interpretation : This chart shows the **decrease in number of patients** who still suffer from the symptom Back Pain over a period of 20 weeks.



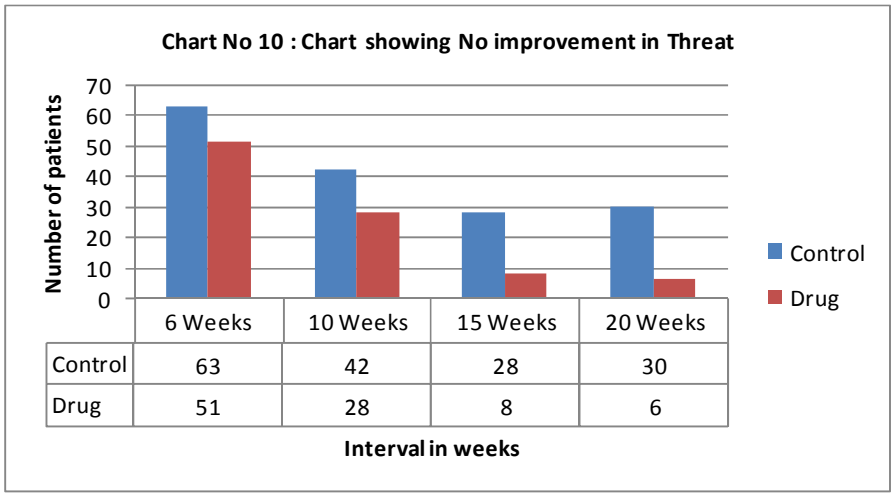
Interpretation : This chart shows the **decrease in number of patients** who still suffer from the symptom, Colicy Pain over a period of 20 weeks.



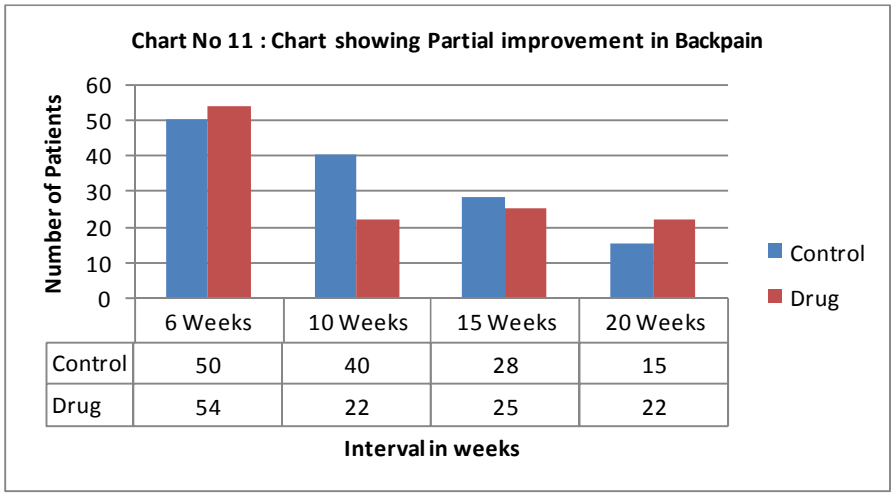
Interpretation : This chart shows the **very few in number of patients** who still suffer from the symptom spotting over a period of 20 weeks. In which drug group shows more positive effect.



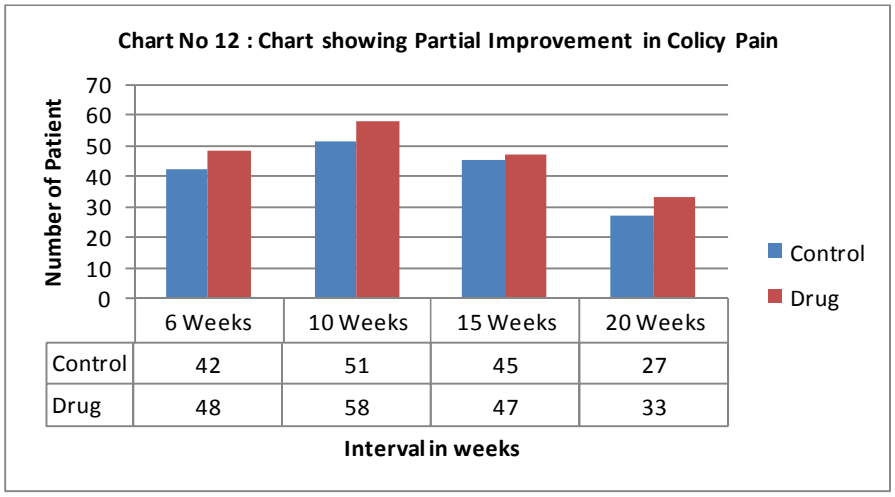
Interpretation : This chart shows the **decrease in number of patients** who still suffer from the symptom Loss of confidence over a period of 20 weeks.



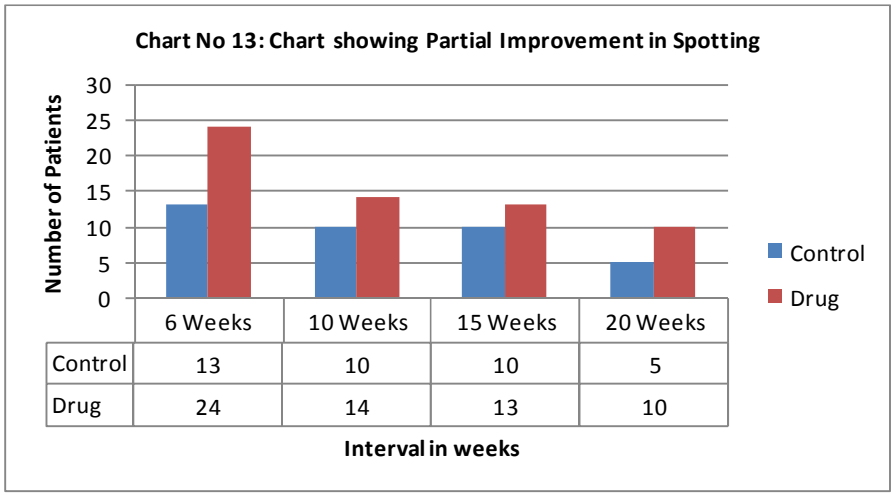
Interpretation : This chart shows the **decrease in number of patients** who still suffer from the symptom Threat over a period of 20 weeks.



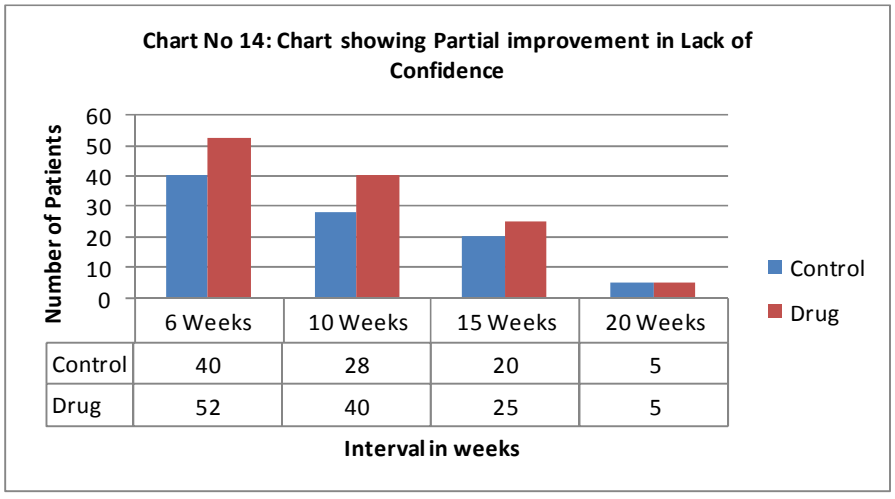
Interpretation : This chart shows the **number of patients showing partial improvement in Backpain.**The pain in Drug group shows is quite satisfactory partial improvement



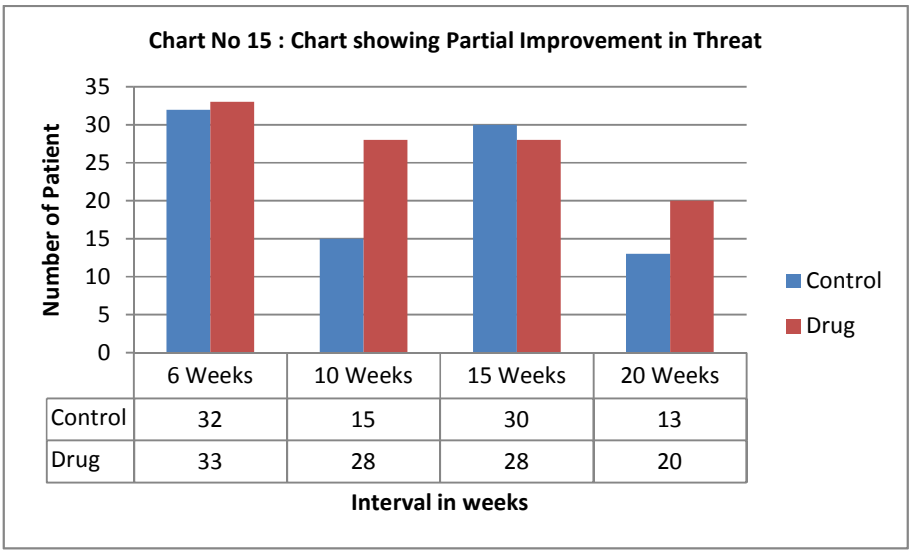
Interpretation : This chart shows the **number of patients showing partial improvement in Colicky pain.**The pain in Drug group shows persistent partial improvement



Interpretation : This chart shows the **number of patients showing partial improvement in Spotting.**The pain in Drug group shows is quite satisfactory



Interpretation : This chart shows the **number of patients showing partial improvement in Loss of confidence.**



Interpretation : This chart shows the **number of patients showing partial improvement in Threat** The improvement in Drug group shows is very good.

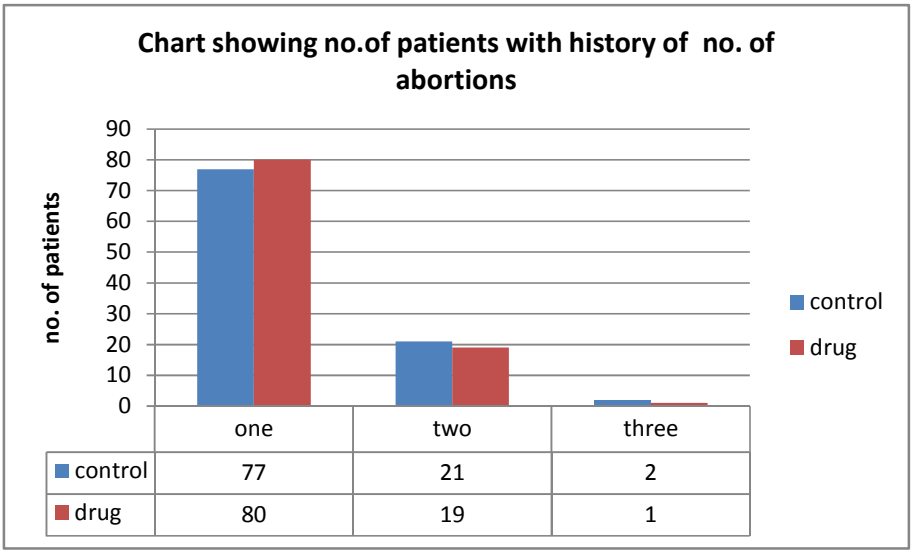


Chart showing the number of patients with history of number of abortions before treatment

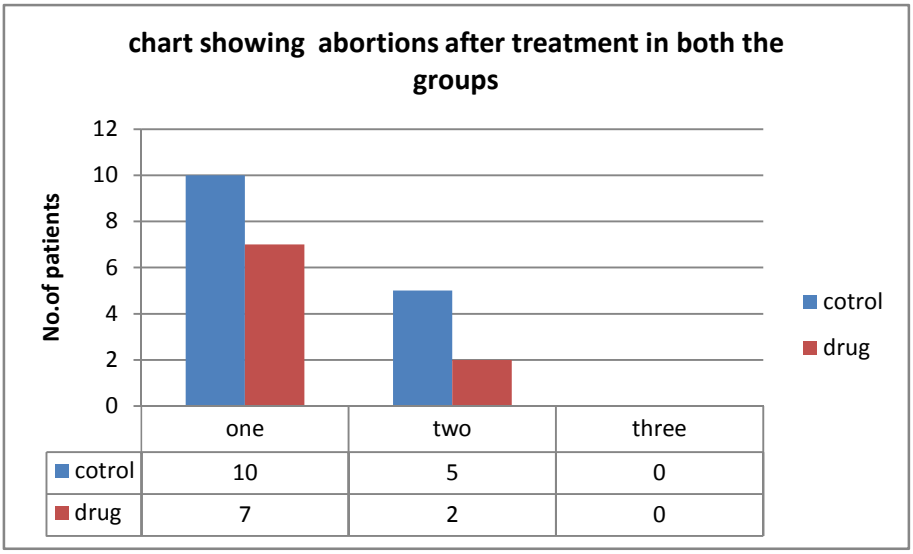


Chart showing the number of patients with history of number of abortions after treatment

Interpretation: This chart shows that after giving the Sushrutokta regimen the number of abortions are much reduced.

Table of Record Of Deliveries

	FTND	Vacuum	LSCS	Premature
Control	43	8	34	5
Drug	57	7	27	0

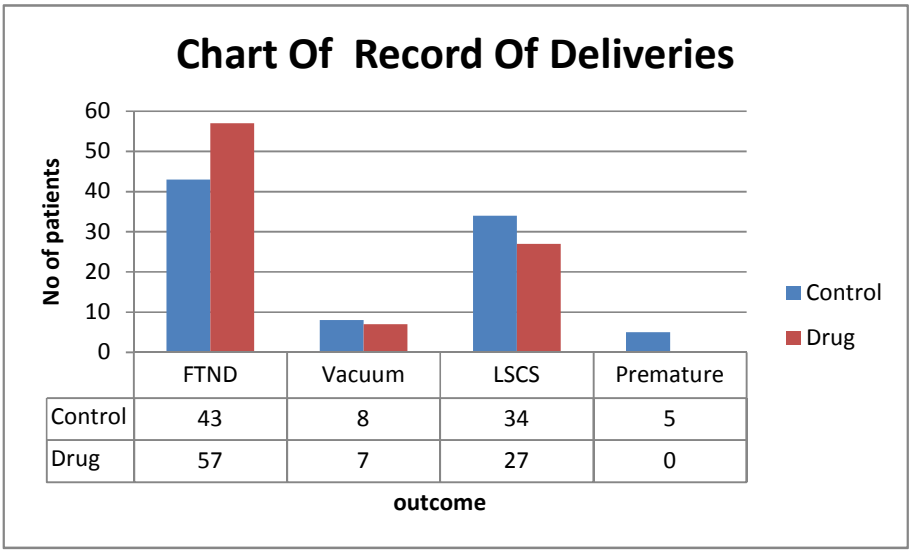


Table showing baby weight in Kg and type of birth in Control Groups

Sr no	Initials	Sex of child	Baby wt	Type of birth	Outcome
1	DTH	Pregnancy Loss			6
2	HMN	Pregnancy Loss			7
3	KLA	Female	3	LSCS	Continued
4	SRD	Female	3.3	FTND	Continued
5	BT	Pregnancy Loss			9
6	FRD	Pregnancy Loss			6
7	CBN	Pregnancy Loss			7
8	MGM	Male	2.8	FTND	Continued
9	SAT	Pregnancy Loss			7
10	KLH	Male	3.6	FTND	Continued
11	HGM	Pregnancy Loss			7
12	BNT	Male	2.9	Vacuum	Continued
13	FCB	Female	2.2	LSCS	premature
14	BHU	Female	3	LSCS	Continued
15	SR	Pregnancy Loss			9
16	VRT	Female	2.5	FTND	continued
17	MKL	Female	3	FTND	Continued
18	KPF	Female	2.6	LSCS	Continued
19	DRN	Female	2.8	LSCS	8
20	MK	Female	2.7	FTND	Continued
21	KLS	Pregnancy Loss			13
22	VBR	Female	2.2	LSCS	Continued
23	HTG	Male	2.8	FTND	Continued
24	DDR	Male	3.25	LSCS	Continued
25	BNG	Male	2.6	FTND	stilbrth

Table showing baby weight in Kg and type of birth in Control Groups

Sr No	Initials	Sex of child	Baby wt	Type f birth	Outcome
26	NDR	Female	3.8	LSCS	Continued
27	SDR	Male	3.5	FTND	Continued
28	CJP	Female	2.8	FTND	Continued
29	PKL	Pregnancy Loss			10
30	FRD	Female	2.7	LSCS	Continued
31	SRV	Male	2.8	LSCS	Continued
32	BTR	Pregnancy Loss			8
33	NDR	Female	2	FTND	incompetent
34	SDR	Male	3	FTND	continued
35	CJP	Male	3.6	LSCS	Continued
36	PKL	Female	2.2	FTND	preterm
37	FRD	Female	2.8	FTND	Continued
38	SRV	Male	3	FTND	Continued
39	BTR	Male	3.3	LSCS	Continued
40	DTH	Male	2.9	LSCS	Continued
41	HMN	Female	2.4	FTND	Continued
42	KLA	Female	3.2	FTND	Continued
43	SRD	Male	3	Vaccum	Continued
44	BHT	Female	2.6	Vaccum	Continued
45	FRD	Male	2.7	FTND	Continued
46	CBN	Male	3	FTND	Continued
47	MGM	Male	3.6	Vaccum	Continued
48	SAT	Pregnancy Loss			7
49	KLH	Female	1.8	LSCS	Premature
50	HGM	Male	2.9	FTND	Continued

Table showing baby weight in Kg and type of birth in Control Groups

Sr No	Initials	Sex of child	Baby wt	Type f birth	Outcome
51	BNT	Male	3	LSCS	Continued
52	FCB	Male	3.2	Vacuum	Continued
53	BHU	Male	2.8	FTND	Continued
54	SRD	Male	3.8	FTND	Continued
55	VRT	Male	2.8	FTND	Continued
56	MKL	Male	4.2	LSCS	Continued
57	KPF	Female	2.1	LSCS	premature
58	DRN	Male	3.4	FTND	Continued
59	MMK	Male	2.4	FTND	Continued
60	KLS	Female	3.2	Vacuum	Continued
61	VBR	Female	2.3	FTND	preterm
62	HTG	Female	2.5	LSCS	Continued
63	DDR	Pregnancy Loss			8
64	BNG	Female	3.2	FTND	Continued
65	MDS	Female	3.2	FTND	Continued
66	ANG	Male	3.1	LSCS	Continued
67	KLA	Female	2.6	FTND	Continued
68	SRD	Male	2.5	LSCS	Continued
69	BHT	Female	3	FTND	Continued
70	FRD	Male	3	LSCS	Continued
71	CBN	Female	2.5	LSCS	Continued
72	MGM	Male	2.8	LSCS	Continued
73	SAT	Female	2.6	FTND	Continued
74	KLH	Female	3.2	LSCS	Continued
75	HGM	Male	2.4	FTND	Continued

Table showing baby weight in Kg and type of birth in Control Groups

Sr No	Initials	Sex of child	Baby wt	Type f birth	Outcome
76	BNT	Male	2.6	LSCS	Continued
77	FCB	Male	2.3	FTND	Continued
78	BHU	Male	2.6	LSCS	Continued
79	SRD	Female	2.9	FTND	Continued
80	VRT	Male	2.8	LSCS	Continued
81	MKL	Male	2.6	LSCS	Continued
82	KPF	Male	3.1	Vacuum	Continued
83	DRN	Male	2.8	FTND	Continued
84	MMK	Female	2.75	FTND	Continued
85	BNG	Female	2.3	FTND	Continued
86	NDR	Male	2.4	FTND	Continued
87	SDR	Female	2.7	FTND	Continued
88	CJP	Female	3.2	LSCS	Continued
89	PKL	Male	2.6	LSCS	Continued
90	FRD	Male	2.4	FTND	Continued
91	SRV	Male	3.2	FTND	Continued
92	BTR	Pregnancy Loss			7
93	NDR	Male	2.6	FTND	Continued
94	SDR	Male	2.6	LSCS	Continued
95	CJP	Female	2.7	LSCS	Continued
96	PKL	Male	2.7	FTND	Continued
97	FRD	Female	2.6	LSCS	Continued
98	SRV	Male	3	LSCS	Continued
99	BTR	Male	2.7	Vacuum	Continued
100	BHL	Female	2.4	LSCS	Continued

Table showing baby weight in Kg and type of birth in DRUG Groups

Sr No	Initials	Sex of child	Baby wt	Type of birth	Outcome
1	SNK	Female	3.3	FTND	Continued
2	SSB	Male	3.2	LSCS	Continued
3	MSS	Male	2.8	FTND	Continued
4	SKS	Female	2.6	FTND	Continued
5	ASD	Male	3.5	LSCS	Continued
6	SPG	Male	2.7	FTND	Continued
7	TSN	Female	2.8	FTND	Continued
8	JPN	Pregnancy Loss			9
9	PPP	Male	3.6	LSCS	Continued
10	ADB	Male	3.3	FTND	Continued
11	JSE	Pregnancy Loss			13
12	SBK	Female	2.85	FTND	Continued
13	SPG	Male	3.1	FTND	Continued
14	SNT	Female	3	LSCS	Continued
15	NTS	Female	3.2	FTND	Continued
16	ASK	Male	3.1	LSCS	Continued
17	SNK	Female	3.4	VACUUM	Continued
18	ADM	Female	3.6	FTND	Continued
19	PVC	Female	3.2	LSCS	Continued
20	KPP	Male	3.1	FTND	Continued
21	RCN	Pregnancy Loss			7
22	DSK	Male	2.6	FTND	Continued
23	PPG	Female	2.8	LSCS	Continued
24	SRK	Male	2.9	LSCS	Continued
25	SBN	Pregnancy Loss			9

Table showing baby weight in Kg and type of birth in DRUG Groups

Sr no	Initials	Sex of child	Baby wt	Type of birth	Outcome
26	SBG	Male	3	LSCS	Continued
27	TSP	Female	3.1	LSCS	Continued
28	SMM	Female	3.8	FTND	Continued
29	CRK	Male	3.3	FTND	Continued
30	SMT	Female	2.7	FTND	Continued
31	JYG	Female	2.8	FTND	Continued
32	SAS	Male	2.9	VACUUM	Continued
33	SBC	Male	3.1	LSCS	Continued
34	SPC	Male	3.3	FTND	Continued
35	KVP	Female	3.6	FTND	Continued
36	SPB	Male	3.5	LSCS	Continued
37	RAR	Male	3.2	FTND	Continued
38	NTK	Male	3.2	FTND	Continued
39	UAB	Male	2.9	FTND	Continued
40	JAK	Female	2.5	FTND	Continued
41	ARS	Female	3.6	VACUUM	Continued
42	SMC	Male	3.1	FTND	Continued
43	MSD	Female	2.7	FTND	Continued
44	GKN	Male	2.6	FTND	Continued
45	RSB	Female	2.8	FTND	Continued
46	CDC	Female	2.9	LSCS	Continued
47	SAK	Female	3.1	LSCS	Continued
48	ASR	Male	3.4	LSCS	Continued
49	RSD	Male	3.1	FTND	Continued
50	SRP	Male	3.2	FTND	Continued

Table showing baby weight in Kg and type of birth in DRUG Groups

Sr no.	Initials	Sex of child	Baby wt	type of birth	Outcome
50	SRP	Male	3.2	FTND	Continued
51	LRM	Female	3.5	FTND	Continued
52	YVT	Male	3.1	FTND	Continued
53	SPS	Female	2.8	LSCS	Continued
54	SVM	Female	2.8	FTND	Continued
55	SSC	Male	3.1	FTND	Continued
56	SSK	Male	2.6	FTND	Continued
57	PHS	Male	2.9	FTND	Continued
58	VSK	Pregnancy Loss			7
59	SBC	Female	3.5	VACUUM	Continued
60	SSS	Female	3.1	LSCS	Continued
61	UNK	Female	3.6	FTND	Continued
62	SKS	Male	2.4	FTND	Continued
63	SSP	Male	2.8	FTND	Continued
64	MTB	Female	2.7	FTND	Continued
65	RAP	Female	2.6	FTND	Continued
66	SAD	Female	3.4	LSCS	Continued
67	RBD	Male	3.3	FTND	Continued
68	PDD	Male	3.6	VACUUM	Continued
69	SPV	Female	3.2	FTND	Continued
70	SPV	Female	3.1	LSCS	Continued
71	KSS	Male	2.8	FTND	Continued
72	LSR	Male	3	FTND	Continued
73	MRB	Female	2.7	FTND	Continued
74	SRK	Male	2.9	FTND	Continued
75	SAP	Female	2.7	LSCS	Continued

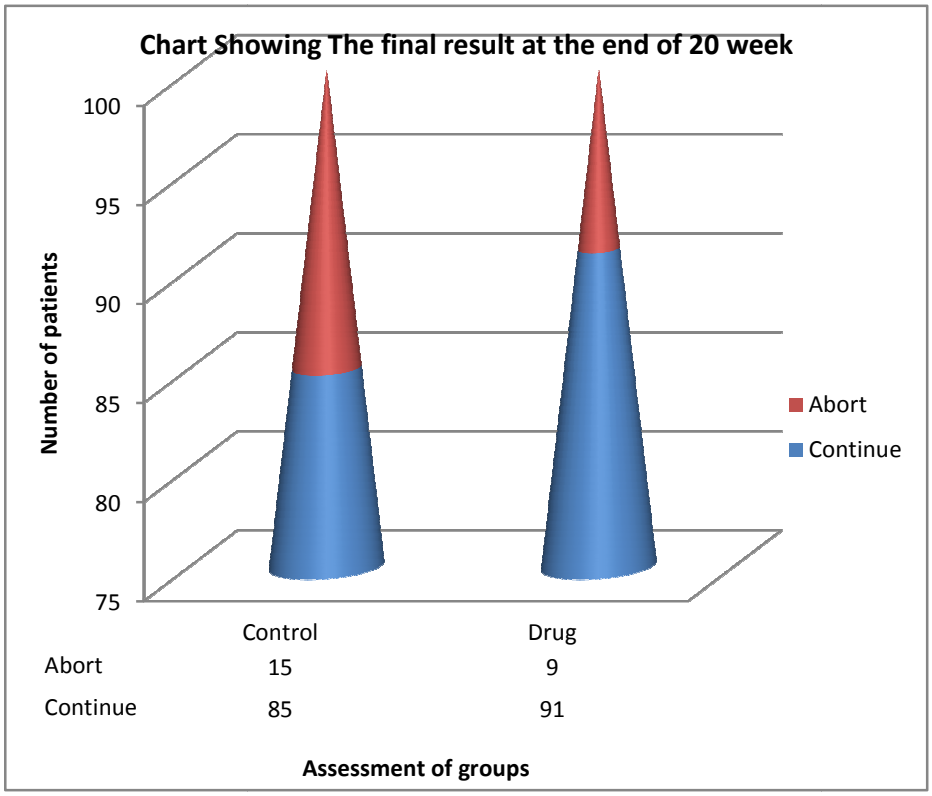
Table showing baby weight in Kg and type of birth in DRUG Groups

Sr No	Initials	sex of child	baby wt	type of birth	Outcome
76	AHP	Pregnancy Loss			14
77	MAG	Male	3.1	LSCS	Continued
78	SKS	Female	3.2	FTND	Continued
79	ANG	Male	3	FTND	Continued
80	SPM	Male	2.6	FTND	Continued
81	SDG	Male	2.8	LSCS	Continued
82	SAD	Female	3	FTND	Continued
83	ADC	Female	2.9	FTND	Continued
84	SAC	Male	3	LSCS	Continued
85	VSJ	Male	3.3	LSCS	Continued
86	STP	Male	3.2	FTND	Continued
87	MPS	Male	3.7	VACUUM	Continued
88	SNG	Pregnancy Loss			9
89	RGB	Male	2.6	FTND	Continued
90	RTP	Male	3	LSCS	Continued
91	NSD	Pregnancy Loss			9
92	PCR	Male	2.8	FTND	Continued
93	SBN	Female	2.9	VACUUM	Continued
94	STP	Male	3.1	LSCS	Continued
95	RTG	Pregnancy Loss			7
96	STC	Male	2.8	FTND	Continued
97	SPB	Female	3	FTND	Continued
98	RSB	Male	2.9	FTND	Continued
99	PTV	Male	3	LSCS	Continued
100	VRT	Male	3.3	FTND	Continued

STATISTICAL ANALYSIS

Statistical Analysis is a scientific process to draw some conclusions by processing available data. These conclusions are based on the laws of chance, i.e.the theory of probability. So for a given set of observations and conditions , the conclusion of a statistical test will not vary for investigator to investigator. Thus it is independent of investigator.

Continuation of Pregnancy



	Control	Drug
Continue	**85**	**91**
Abort	**15**	**9**

Chi square test

Chi-square statistic (with Yates correction) = 1.184

The two-sided P value is 0.2766, considered not significant.

The row/column association is not statistically significant.

Interpretation:

There is no significant difference for **Continuation of Pregnancy** in both the groups.

The analysis done at the end of 45 days is given below

1. **Back ache**

Backache	improved	not improved
Control	75	13
Drug	80	15

Chi squared equals 0.036 with 1 degrees of freedom

The two-tailed P = 0.8486

Interpretation:

There is significant difference for Backache in both the groups.

2. **Colicy pain**

Colicy Pain	improved	not improved
Control	76	12
Drug	85	10

Chi squared equals 0.175 with 1 degrees of freedom.

The two-tailed P = 0.6753

Interpretation:

There is no significant difference for Colicy Pain in both the groups.

3. **Spotting**

Spotting	improved	not improved
Control	84	4
Drug	90	4

Chi squared equals 0.009 with 1 degrees of freedom.

The two-tailed P = 0.9240

Interpretation:

There is no significant difference for Spotting in both the groups.

4. **Loss of confidence**

LOC	improved	not improved
Control	52	36
Drug	82	13

Chi squared equals 18.397 with 1 degrees of freedom.

The two-tailed P <0.0001

Interpretation:

There is significant difference for LOC in both the groups.

5. **Threat**

Threat	improved	not improved
Control	51	39
Drug	85	10

Chi squared equals 23.890 with 1 degrees of freedom.

The two-tailed P value < 0.0001 considered extremely significant.

Interpretation:

There is significant difference for LOC in both the groups.

Statistical Analysis done At the end of 20th weeks.

1. **Backache**

Backache	improved	not improved
Control	69	16
Drug	80	11

Chi squared equals 1.060 with 1 degrees of freedom

The two-tailed P = 0.3031

Interpretation:

There is significant difference for Backache in both the groups.

2. **Colicy pain**

Colicy Pain	improved	not improved
Control	72	13
Drug	81	10

Chi squared equals 0.388 with 1 degrees of freedom.

The two-tailed P = 0.5333

Interpretation:

There is no significant difference for Colicy Pain in both the groups.

3. **Spotting**

Spotting	improved	not improved
Control	83	2
Drug	90	1

Chi squared equals 0.004 with 1 degrees of freedom.

The two-tailed P = 0.9525

Interpretation:

There is no significant difference for Spotting in both the groups.

4. **Loss of confidence**

LOC	improved	not improved
Control	65	20
Drug	80	11

Chi squared equals 3.215 with 1 degrees of freedom.

The two-tailed P = 0.0729

Interpretation:

There is difference, but not quite significant for LOC in both the groups.

5. Threat

Threat	improved	not improved
Control	55	30
Drug	85	6

Chi squared equals 20.521 with 1 degrees of freedom.

The two-tailed P value < 0.0001 considered extremely significant.

Interpretation:

There is significant difference for Threat in both the groups.

Effect of Meditation

Change in Systolic BP

Statistic	Day1	Day15
Mean	119.93	118.73
Lower 95% CI:	**116.69**	**116.73**
Upper 95% CI:	**123.18**	**120.74**
Std error:	**1.586**	**0.9802**

The two-tailed P value is 0.3473, considered extremely significant.

t = 0.9553 with 29 degrees of freedom.

Interpretation: No significant difference after treatment for Systolic blood pressure.

Change in sleep hours

Statistic	Day15	Day15
Mean	**6.350**	**7.440**
Lower 95% CI:	**6.055**	**7.191**
Upper 95% CI:	**6.645**	**7.689**
Std error:	**0.1441**	**0.1219**

The two-tailed P value is **< 0.0001** considered extremely significant.

t = 11.703 with 29 degrees of freedom.

Interpretation:

Significant difference in sleep hours is observed after treatment. Average sleep after meditation is increased by one hour.

Change in the fear factor

Chi-square statistic (with Yates correction) = 6.496

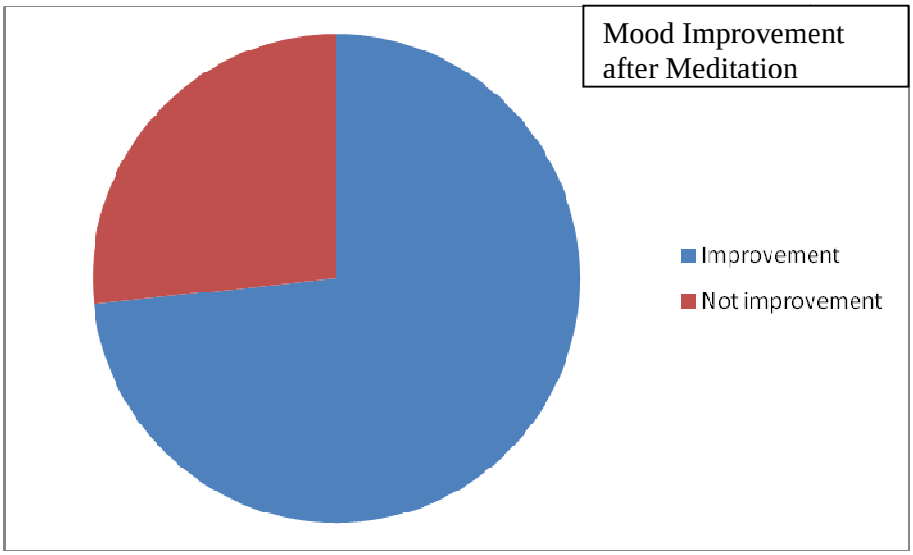
Chi - square test, P = 0.0108

Interpretation:

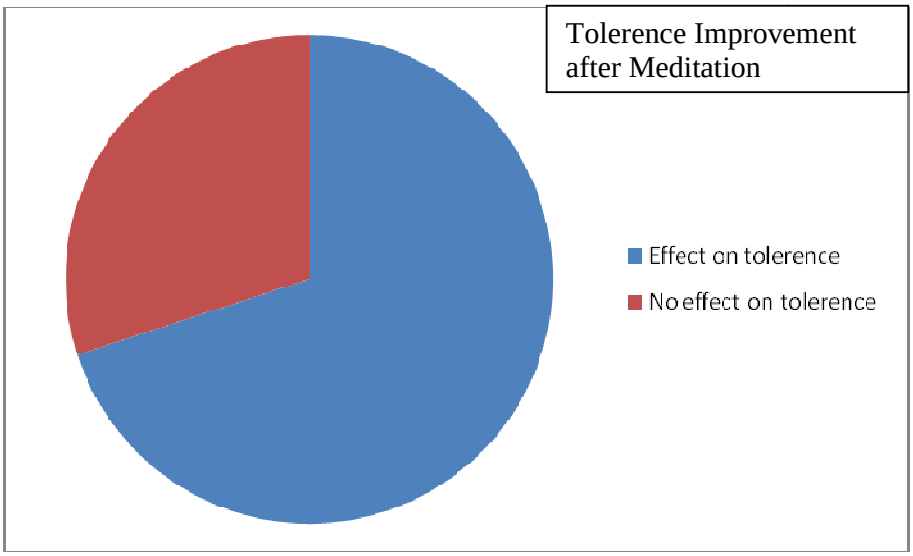
Significant difference in both the groups was observed for **Change in fear factor**. More benefit to reduce fear factor was observed in Drug group.

Qualitative Data of meditation effects

1. **Mood Improvement in 23 of 30 patients, improvement of mood was observed.**



2. **Tolerence Improvement is observed in 21 of 30 patients.**



DISCUSSION:

The study was conducted in two groups of 100 patients each. and one add on group just of 30 patients. The main aim to assess the preventive role of Sushrutokta Garbhini regimen in miscarriage upto 20 weeks. The results were compared with the proven effects of Modern antenatal care .All the clinical findings were noted and observations made which can be justified accordingly:

Discussions on general observations:

1. Age wise :

Maximum patients were in the age group of to25 to 35 years. The average age for both the groups is 28 years. Now a days because of knowing the importance of education, females go for higher graduation, also have many a times late marriages.

2. Occupation wise :

Patients from service & business category followed by housewives are most affected patients in the society. Lack of physical activities can be the precipitating factor for service & housewives category whereas stress and improper food style may be the cause for business class.

3. Family History wise :

.In about 2-3 % patient's family history was found. It is not seen most common that it is connected to family history.

4. Aahara Viharaja Hetu wise :

Tikshna, Ushna, Abhishyandi Gunatmak ahara, with Aggrevation of apana vayu, Garbhini Paricharya without following the rules i.e. accepting the garbhopghatkar bhavas, emotional and physical stresses are the common causes

seen almost in all the pregnant mother. Thus improper food style & life style are the precipitating factors leading to vitiation of Apana Vayu & Shukra Dhatu. These factors are said to be the main aetiological factors for Pregnancy loss in the classical texts. Thus the reason can be justified.

DISCUSSION ON CLINICAL OBSERVATIONS:

1. **Backpain:**

Acute pain in the pain is very much alarming sign in pregnancy loss. It is due to aggravation of vayu Dosha leading to pain in the back. It is a clinical sign. Due to this irritation in the abdominal cavity causes pain in flanks, kukshi (lower abdomen or uterus), bastshirsha (neck of bladder) abdomen and vagina,

2. **Colicy pain:**

It is a clinical sign of pregnancy loss. As because of the aggravation of apana vayu, also pitta Dosha the pain in the lower abdomen and epigastric region is seen .It also causes distension of abdomen or flatulence , retention of urine.

3. **Spotting:**

Blood Stain discharge on the under garments is the cardinal sign of Pregnancy loss. It is due to aggravation of apana vayu, and vitiation of pitta Dosha, and located in rakta dhatu and shukra dhatu.

4. **Loss of confidence :**

The history of abortion is already having a psychological trauma on the pregnant mother. Aggravation of Dosha i. e. mainly vata Dosha ,leads to depletion of pitta(sadhak pitta) and also oja kshaya . This leads to the emotional fluctuation.

5. Threat :

The fear of losing the pregnancy is continuously bothering the pregnant mother. So she always under the threat of pregnancy loss. So every single complaint she is going through is always making her upset. The oja kshaya and the aggravation of vata and pitta Dosha is the main reason for the sign of Threat.

DISCUSSION ON EFFECT OF SUSHUTOKTA REGIMEN ON THE PREGNANCY LOSS:

After administration of Sushrutokta regimen upto 20 wks , it has shown very good result on preventing the pregnancy loss . To access the effect evry parameter was observed and the results were calculated.

The sonography parameters didn't show much vast difference but mainly important observation was the number of pregnancy loss. In the Control Group, it was seen that out of 100 patients 15 patients had pregnancy loss and in the group with sushutokta regimen number of patients having pregnancy loss was 6. The meditation group means the group with sushrutokta regimen and Ashta Mangal Dhyan the result found was very much promising as all the pregnancies were preserved .Thus it looks very much significant.

The number will be observed more promising if studied on the large number of patients.

No matter the result is not statistically significant with only Sushrutokta Regimen but still it is giving good satisfactory result is a positive sign. When the first follow up

1. Back pain:

When the follow up after 15, 30, 45 days was taken the Drug (Sushrutokta regimen) group showed a positive result of more than 70% in relieving the pain .

In weeks assessment at the end of 20wks it was seen that the result showed almost 60% improvement in drug group. Also in the meditation group the improvement was almost 75%. .

In comparison between the 2 groups though statistically not so significant but more reduction in Drug group is seen .

2. Collicy pain:

When the follow up after 15,30,45 days was taken, the number of patients showing the reduction in collicy pain was much more in drug group.

In assessment in weeks at the end of 20 wks both roups didn't showed much difference in the results but the drug group showed more positive results.

In meditation group the result was very much satisfactory almost 70%.

In comparison , between the two group statistically though it is not so significant but more reduction in Drug group is seen.

3. Spotting:

When the follow up after 15,30,45 days was taken, the number of patients showing the reduction in spotting was almost the same.

In assessment in weeks at the end of 20 weeks both groups didn't showed much difference in the results but the drug group showed little faster improvement.

In meditation group the result was very much satisfactory almost 70%.

In comparison , between the two group statistically though it is not so significant but more reduction in Drug group is seen.

4. **Loss of confidence:**

When the follow up after 15,30,45 days was taken, the number of patients showing good positive result in the Sushrutokta regimen group.

In assessment in weeks at the end of 20 weeks , the drug group showed the good positive result consistently.

In meditation group the result was very much satisfactory almost 80%.

In comparison , between the two group statistically though it is not so significant but more reduction in Drug group is seen.

5. Threat:

When the follow up after 15,30,45 days was taken, the number of patients showing the reduction in Threat significantly good in the drug group.

In assessment in weeks at the end of 20 weeks both groups the results so very much improvement consistently in the drug group.

In meditation group the result was very much satisfactory almost 85%.

In comparison , between the two group statistically it is so significant . it really gives the positive result..

6. Overall effect of treatment:

In all the 130 patients who received the treatment in two groups, almost all patients has got good results upto 80% in various parameters.

Because of all the herbs plays an important role in pregnancy loss because of its safety and immunomodulatory, antioxidant and antimicrobial actions, which are, the characteristics of most herbal rasayanas.which are present in Masanumas tabs have helped to pacify the vitiated Vata along with its harborers like Rasa, Rakta Shukra and Ojus, Thus it has lead to controlled Apana Vayu Vikriti and Shukra Daurbalya and improvisation in Beej -Dosha Thus overall effect is seen by considerable changes in various parameters of pre and post treatment. Sushrutokta regimen containing many herbs might possess an ability to encourage enough enzyme production of the active principles contained in them might mimic this action. It is also possible that they actually bring about the proteolytic action and help in the stabilization of the foetus and make the implantation more firm and secured. The phytochemical study of these twenty herbs is enormous. The isolated principles have some times good effects and some time bad effects. As everybody knows that the fragmented and isolated so called active principles do not exist in nature as they appear to us the when isolated

The formulation conceived with the objective of better anteatal care of a pregnant women, which is to achieve the birth of a better newborn with increased birth weight and good health (physical and mental abilities) It is a good nutritional supplement for both the pregnant and lactating mothers Sushrutokta regimen seems to contain the important components (phytonutrients) described as Jeevaneeya (everythropoetic), Balya (strength promoter) and Medhya (promotion of mental abilities). Rasayana ingredients help in modulation or 'fine tuning' of various immune process at the placental level.

In Sushrutokta Garbhini Regimen diet is also mentioned as important. In the first month cold milk sip by sip is advised upto 300 ml par day. If the lady is not willing to have milk .she is said to add shtavari kalpa to make it palatable and more effective also.In the second month milk is accompanied with 'Madhura Gana Ayurvedic medicines' with a difference that the milk is reduced to half the quantity.

In the third month again milk is accompanied with rice of the sixty day's maturity (Sathe Saal – Shali Shashtik). In the forth month the diet is enriched with butter. And in the fifth month the diet prescribed in the previous months is further enriched with Cow's clarified butter (Ghee). It appears that the dietary fatty substances and milk might be acting as 'solvents' for the active principles and they might also be carrying these active principles to the site i.e. at the placenta and endometrial junction.

Ayurvedic treatment was also supplemented by making use of 'Ashta Mangala Yantra' in selected 30 patients who also received Sushrutokta Garbhini Regimen. The procedure for the use of Ashtamanagala Yantra.The fundamental concepts of meditation is colour meditation.

After the Ashta Mangal Meditation the pregnant mother is seen to have sound sleep. Als the sleep hour increase by one hour. Mood also changed in a good way in 50% of patients. Pain Tolerance was seen improved in 20 patients. It was really gives the very positive and promising result. The most important is that all the pregnancy were successfully continued upto 20 wks.

The follow up of patients was taken upto 20 wks but the success of treatment can only be proved when a mother has a live healthy child on her lap. So

the record of all patients was collected through communication. It showed that in control group 43 patients had normal child birth , out of that one was stillbirth. 8 were vacuum deliveries and 34 had cesarean section. Also 5 premature births were seen n control group.

In the Drug group 57 had normal child birth , 7 vacuum deliveriers And 27 had cesarean section. Not a single premature birth was seen. This is also gives a positive finding towards the study.

The results of Modern antenatal care already proven. So though the result is not so significant statistically ,but still to save every life is the most important thing and also the best thing for the pregnant mother.

CONCLUSIONS:

From the study of **Sushrutokta Garbhini Regimen,** following conclusion can be drawn-

1. This regimen is safe for the mother and the baby when followed in the prescribed approach.

2. The regimen can be followed as a preventive measure.

3. The regimen with the monthly diet if pursue sincerely, it is possible to carry an uneventful and fullterm pregnancy.

4. To start Sushrutokta Garbhini Regimen at the earliest, The the patients are convinced to give a positive history of previous single or multiple pregnancy loss to prevent future miscarriges .

5. Along with Sushrutokta Regimen, meditation and care by the family members should be practiced to help a satisfactory outcome.

SCOPE FOR FURTER STUDY:

For more support to the results more number of cases needs to be reviewed.It requires more detailed study with more number of patients diagnosed as ‘threatened abortion or pregnancy loss.

It goes without saying that the diagnosis must be as early as possible. As a preventive measure, if the patient gives positive history of previous single or multiple pregnancy loss then if such patients are put immediately on Sushrutokta Garbhini Regimen then the foetal loss prevented.

The detailed study of each herb, immunological effect of the herb could be studied in detail.W e have seen the “sum total effect” of the herbs, diet and day to day behavior .The data can become a separate topic of clinical trial to judge the effects of medicinal properties on different aspect of pregnancy.and prevention pregnancy loss. The indivisual can be studied more for detailed evaluation.

Alkaloids could be extracted from each herb and they could be studied find out protective molecules that are responsible for the stabilization of the pregnancy and it would be interesting to know how they are able to continue the development in preventing the pregnancy loss.

Meditation is another vast topic to study .The effect of the Ashta mangala dhyan on the central nervous system of a pregnant mother could become separate topic for study.

CLINICAL DATA IN TABULAR FORM

Table 1

Table showing the general information about the patients in CONTROL group.

Sr. No.	Initials	Age	P.I. No.	Preg. M.	Education	Income	Occupation
1	DTH	26	1	2	Secondary	20000	Service
2	HMN	22	2	3	Secondary	34500	Household
3	KLA	25	1	4	Secondary	21000	Business
4	SRD	28	2	2	Primary	32750	Service
5	BT	22	1	3	Secondary	52000	Business
6	FRD	28	1	2	Secondary	24850	Household
7	CBN	31	2	3	Secondary	30700	Household
8	MGM	32	1	2	Primary	28800	Household
9	SAT	26	2	1	Primary	25750	Service
10	KLH	24	1	3	Secondary	31000	Household
11	HGM	30	3	2	Higher	32700	Service
12	BNT	33	1	3	Secondary	29000	Service
13	FCB	35	2	2	Secondary	28950	Service
14	BHU	29	1	3	Primary	32600	Business
15	SR	37	2	2	Secondary	30000	Household
16	VRT	26	1	3	Higher	26950	Service
17	MKL	24	1	3	Higher	30600	Household
18	KPF	29	2	3	Secondary	20000	Service
19	DRN	34	1	3	Secondary	23000	Service
20	MK	26	2	3	Secondary	29650	Business
21	KLS	28	1	4	Secondary	30000	Business
22	VBR	31	2	3	Secondary	30650	Service
23	HTG	30	1	1	Primary	29500	Household
24	DDR	21	1	2	Secondary	35000	Household
25	BNG	23	3	3	Secondary	21000	Household

Table 1
Table showing the general information about the patients in CONTROL group

Sr. No.	Initials	Age	P.I. No.	Preg. M.	Education	Income	Occupation
26	NDR	30	1	2	Primary	29000	Service
27	SDR	26	1	3	Primary	28950	Service
28	CJP	25	1	3	Secondary	32600	Service
29	PKL	35	2	3	Secondary	30000	Business
30	FRD	28	1	2	Primary	26950	Business
31	SRV	22	2	1	Higher	30600	Service
32	BTR	28	1	4	Secondary	40000	Household
33	NDR	31	2	3	Secondary	23500	Service
34	SDR	32	2	3	Secondary	29650	Business
35	CJP	26	3	1	Secondary	30000	Service
36	PKL	24	1	1	Secondary	30650	Household
37	FRD	30	3	4	Secondary	29500	Household
38	SRV	33	2	1	Higher	35000	Household
39	BTR	31	1	4	Primary	29000	Household
40	DTH	29	1	2	Higher	28950	Service
41	HMN	37	2	1	Secondary	32600	Household
42	KLA	26	1	3	Secondary	30000	Service
43	SRD	24	3	3	Secondary	26950	Service
44	BHT	29	1	4	Secondary	30600	Service
45	FRD	34	2	1	Primary	38000	Business
46	CBN	26	1	3	Higher	34500	Household
47	MGM	28	2	1	Secondary	23600	Service
48	SAT	31	1	2	Higher	32750	Household
49	KLH	30	2	1	Secondary	52000	Service
50	HGM	21	1	4	Higher	24850	Service

Table 1
Table showing the general information about the patients in CONTROL group

Sr. No.	Initials	Age	P.I. No.	Preg. M.	Education	Income	Occupation
51	BNT	23	1	3	Secondary	30700	Business
52	FCB	31	2	5	Secondary	28800	Household
53	BHU	28	3	1	Secondary	25750	Service
54	SRD	31	1	1	Secondary	31000	Business
55	VRT	32	1	2	Primary	32700	Household
56	MKL	26	2	3	Higher	29000	Household
57	KPF	24	1	1	Secondary	28950	Service
58	DRN	30	2	5	Primary	32600	Service
59	MMK	33	1	3	Secondary	30000	Service
60	KLS	31	3	4	Secondary	26950	Business
61	VBR	29	2	1	Secondary	30600	Business
62	HTG	37	1	1	Secondary	20000	Service
63	DDR	26	2	1	Higher	23000	Business
64	BNG	24	1	2	Secondary	29650	Business
65	MDS	29	2	3	Secondary	29500	Service
66	ANG	34	1	1	Secondary	35000	Business
67	KLA	26	2	3	Secondary	29000	Household
68	SRD	28	1	1	Primary	28950	Household
69	BHT	31	1	4	Secondary	32600	Service
70	FRD	30	2	3	Higher	30000	Service
71	CBN	29	1	1	Primary	26950	Service
72	MGM	37	1	5	Higher	30600	Household
73	SAT	26	2	3	Secondary	20000	Business
74	KLH	24	1	5	Secondary	34500	Service

Table 1
Table showing the general information about the patients in CONTROL group

Sr. No.	Initials	Age	P.L. No.	Preg. M.	Education	Income	Occupation
75	HGM	29	2	1	Secondary	21000	Household
76	BNT	34	1	1	Higher	32750	Service
77	FCB	26	1	3	Primary	22000	Business
78	BHU	28	2	1	Higher	24850	Service
79	SRD	31	1	1	Higher	30700	Business
80	VRT	30	3	1	Secondary	28800	Household
81	MKL	21	2	4	Secondary	25750	Household
82	KPF	23	2	3	Secondary	31000	Household
83	DRN	31	1	1	Primary	32700	Service
84	MMK	28	3	2	Higher	29000	Business
85	BNG	31	1	3	Secondary	28950	Business
86	NDR	23	3	2	Primary	32600	Service
87	SDR	30	1	1	Primary	30000	Household
88	CJP	26	1	2	Secondary	26950	Household
89	PKL	25	2	3	Secondary	30600	Household
90	FRD	35	1	2	Primary	30000	Service
91	SRV	28	1	3	Primary	23000	Service
92	BTR	22	2	4	Secondary	29650	Service
93	NDR	28	1	1	Higher	25750	Business
94	SDR	31	1	1	Secondary	31000	Business
95	CJP	32	2	1	Secondary	32700	Service
96	PKL	26	1	3	Primary	29000	Business
97	FRD	24	1	1	Secondary	28950	Business
98	SRV	30	2	2	Higher	21000	Business
99	BTR	33	3	4	Secondary	30000	Business
100	BHL	31	1	1	Higher	25750	Service

Table No 2
Table showing the general information about the patients in DRUG group

Sr. No.	Initials	Age	P.L. No.	Preg. M.	Education	Income	Occupation
1	KPF	29	3	1	Secondary	32000	Household
2	DRN	34	2	3	Secondary	20000	Service
3	MK	26	1	4	Primary	24000	Business
4	KLS	28	2	2	Secondary	21000	Household
5	VBR	31	3	5	Secondary	32750	Household
6	HTG	30	1	3	Primary	52000	Household
7	DDR	29	3	2	Secondary	24850	Service
8	BNG	37	2	3	Secondary	30700	Household
9	NDR	26	1	1	Secondary	28800	Service
10	SDR	24	2	1	Secondary	25750	Service
11	CJP	29	2	1	Secondary	21000	Service
12	PKL	34	1	5	Primary	22000	Household
13	FRD	26	2	3	Secondary	29000	Household
14	SRV	28	1	1	Higher	28950	Service
15	BTR	31	3	2	Secondary	32600	Household
16	NDR	30	2	3	Higher	30000	Service
17	SDR	21	2	2	Secondary	26950	Service
18	CJP	23	1	4	Secondary	18600	Business
19	PKL	31	1	4	Secondary	19000	Business
20	FRD	28	2	2	Secondary	23000	Service
21	SRV	31	1	3	Primary	29650	Business
22	BTR	23	1	3	Secondary	30000	Household
23	DTH	30	1	1	Secondary	30650	Household
24	HMN	26	1	1	Primary	29500	Service
25	KLA	25	1	3	Secondary	35000	Service

Table No 2

Table showing the general information about the patients in DRUG group

Sr. No.	Initials	Age	P.L. No.	Preg. M.	Education	Income	Occupation
26	SRD	35	2	4	Secondary	21500	Service
27	BHT	28	3	2	Secondary	31000	Business
28	FRD	22	2	3	Primary	23000	Service
29	CBN	28	1	5	Primary	29000	Household
30	MGM	31	2	1	Secondary	28950	Service
31	SAT	32	1	4	Secondary	32600	Service
32	KLH	26	1	2	Secondary	30000	Service
33	HGM	24	2	3	Secondary	26950	Business
34	BNT	30	2	1	Primary	30600	Household
35	FCB	25	2	2	Secondary	20000	Service
36	BHU	35	1	4	Higher	23500	Household
37	SRD	28	3	1	Secondary	29650	Service
38	VRT	22	2	2	Higher	30000	Service
39	MKL	28	1	3	Secondary	30650	Business
40	KPF	31	2	1	Secondary	29500	Business
41	DRN	32	3	2	Secondary	25000	Service
42	MMK	26	1	4	Secondary	21000	Household
43	KLS	24	3	1	Primary	29000	Household
44	VBR	30	3	3	Higher	28950	Household
45	HTG	33	2	4	Secondary	32600	Service
46	DDR	31	3	1	Higher	30000	Service
47	BNG	29	1	3	Primary	26950	Service
48	MDS	37	2	2	Secondary	30600	Business
49	KLS	26	1	3	Secondary	19500	Household
50	VBR	24	2	1	Secondary	20000	Service

Table No 2

Table showing the general information about the patients in DRUG group

Sr. No.	Initials	Age	P.L. No.	Preg. M.	Education	Income	Occupation
51	HTG	29	3	2	Secondary	14000	Household
52	DDR	34	2	4	Secondary	21000	Service
53	BNG	26	1	3	Primary	32750	Service
54	MDS	28	3	2	Higher	22000	Business
55	ANG	31	1	1	Secondary	24850	Business
56	KLA	30	2	3	Secondary	30700	Service
57	SRD	21	1	1	Primary	28800	Business
58	BHT	23	2	2	Secondary	25750	Household
59	FRD	31	2	3	Secondary	31000	Household
60	CBN	28	1	4	Primary	32700	Service
61	MGM	31	1	1	Primary	29000	Service
62	SAT	32	2	2	Secondary	28950	Service
63	KLH	25	1	3	Secondary	22000	Business
64	HGM	35	3	2	Secondary	30000	Business
65	BNT	28	1	1	Secondary	26950	Service
66	FCB	22	3	4	Primary	30600	Business
67	BHU	28	1	3	Secondary	19500	Household
68	SRD	31	1	5	Higher	23000	Service
69	VRT	32	2	3	Secondary	29650	Business
70	MKL	26	1	1	Secondary	30000	Household
71	KPF	24	3	2	Secondary	30650	Household
72	DRN	30	1	2	Secondary	29500	Business
73	MMK	25	2	2	Secondary	35000	Household
74	BNG	35	2	4	Higher	21750	Service

Table No 2

Table showing the general information about the patients in DRUG group

Sr. No.	Initials	Age	P.L. No.	Preg. M.	Education	Income	Occupation
75	NDR	28	1	3	Secondary	31000	Household
76	SDR	22	1	1	Secondary	30600	Service
77	CJP	28	3	3	Secondary	2000	Service
78	BTR	31	1	1	Secondary	43500	Business
79	NDR	32	2	2	Secondary	29650	Household
80	SDR	26	1	4	Secondary	30000	Service
81	CJP	24	1	2	Primary	30650	Business
82	PKL	30	3	1	Higher	29500	Household
83	FRD	33	1	1	Secondary	35000	Household
84	SRV	31	2	3	Primary	21500	Service
85	BTR	29	1	4	Primary	29000	Service
86	DTH	37	3	2	Secondary	28950	Service
87	HMN	26	1	1	Secondary	32600	Business
88	KLA	24	1	3	Secondary	30000	Household
89	SRD	29	2	2	Primary	26950	Service
90	BHT	34	3	3	Secondary	22000	Household
91	FRD	30	1	1	Secondary	19000	Service
92	CBN	21	3	4	Secondary	20000	Service
93	MGM	23	1	2	Secondary	34500	Household
94	SAT	31	3	1	Primary	21000	Service
95	KLH	28	1	4	Secondary	22000	Service
96	HGM	31	2	2	Higher	52000	Service
97	BNT	32	1	4	Primary	29000	Household
98	BHU	25	3	1	Secondary	28950	Household
99	SRD	35	1	3	Secondary	32600	Service
100	VRT	28	2	2	Secondary	30000	Service

TABLE NO.3

DROP OUTS IN CONTROL GROUP

Sr. No.	Initials	Back Pain	Colliccy Pain	Spotting	L.O.C	Fear	Dropout In Wk	Reason	Outcome
101	**NMM**	4	3	0	0	0	5	Unco-Operative	Drop Out
102	**GSM**	3	3	1	1	1	6	A.M.A.	Drop Out
103	**SKM**	3	2	1	0	1	6	Unknown	Drop Out
104	**Ssk**	2	2	0	2	1	7	A.M.A.	Drop Out
105	**MNS**	3	2	2	0	0	6	Transferred	Drop Out
106	**BBT**	4	3	0	1	2	7	Unknown	Drop Out
107	**SRP**	4	2	1	0	0	6	A.M.A.	Drop Out
108	**PAS**	4	2	2	0	0	9	Unco-Operative	Drop Out
109	**RSD**	4	2	1	0	0	7	A.M.A.	Drop Out
110	**DRP**	4	2	0	1	1	5	Unknown	Drop Out

TABLE NO.4

DROP OUTS IN DRUG GROUP

Sr. No.	Initials	Back Pain	Colliccy Pain	Spotting	L.O.C	Fear	Dropout In Wk	Reason	Outcome
101	**ASP**	4	2	1	0	0	6	A.M.A.	Drop Out
102	**TJM**	4	4	2	0	0	6	Unco-Operative	Drop Out
103	**LST**	3	3	2	0	0	7	Transferred	Drop Out
104	**ADP**	4	3	0	0	0	6	Unknown	Drop Out
105	**KST**	4	2	2	0	1	6	A.M.A.	Drop Out
106	**SPP**	4	3	2	0	9	5	Transferred	Drop Out
107	**VHP**	2	1	2	1	2	7	Transferred	Drop Out
108	**ADL**	4	2	0	2	0	8	Unco-Operative	Drop Out

Table No 5

Sonographic findings in Ayurvedic Treatment(DRUG) Group

				Six Week USG Report			12 Week USG Report		20 Weeks USG Report			
Sr. No	Initials	Outcome	Wk of PL	Sac Size	Embryo Size	Heart activity	CRL	BPD	BPD	HC	AC	FL
1	SNK	1	5	12	2	Present	52	18	49	165	142	31
2	SSB	1	6	10	2	Present	53	20	51	172	140	32
3	MSS	1	5	12	2	Present	54	19	48	170	144	33
4	SKS	1	6	14	3	Present	51	19	50	166	148	32
5	ASD	1	7	11	2	Present	50	18	51	178	150	34
6	SPG	1	5	10	2	Present	53	20	49	180	148	33
7	TSN	1	6	12	3	Present	51	18	50	168	145	31
8	BNG				Pregnancy Loss, No cardiac activity seen.							
9	PPP	1	5	11	2	Present	53	19	48	177	142	32
10	ADB	1	5	10	2	Present	52	18	50	180	144	32
11	JSE	2	7		Pregnancy Loss, No cardiac activity seen.							
12	SBK	1	5	12	2	Present	55	19	51	167	146	34
13	SPG	1	5	11	2	Present	51	18	48	172	144	33
14	SNT	1	6	13	2	Present	53	18	50	178	148	31
15	NTS	1	6	10	3	Present	54	20	51	180	144	34
16	ASK	1	6	12	2	Present	51	18	49	175	146	32
17	SNK	1	5	14	2	Present	50	18	48	170	144	33
18	ADM	1	7	11	3	Present	53	20	50	174	146	34
19	PVC	1	5	10	2	Present	52	18	50	168	144	32
20	KPP	1	5	12	2	Present	53	20	51	179	148	31
21	RCN	2	6		Pregnancy Loss, No cardiac activity seen							
22	DSK	1	6	11	3	Present	51	18	51		150	31
23	PPG	1	5	10	3	Present	52	18	51	169	144	34
24	SRK	1	6	12	2	Present	53	18	48	174	145	32
25	SBN	2	7		Pregnancy Loss, No cardiac activity seen.							

Table No 5

Sonographic findings in Ayurvedic Treatment(DRUG) Group

				Six Week USG Report			12 Week USG Report		20 Weeks USG Report			
Sr. No	Initials	Outcome	Wk of PL	Sac Size	Embryo Size	Heart activity	CRL	BPD	BPD	HC	AC	FL
26	SBG	1	5	12	2	Present	51	19	51	178	144	34
27	TSP	1	6	11	2	Present	53	18	51	180	144	32
28	SMM	1	7	13	2	Present	54	18	48	175	145	33
29	CRK	1	5	10	2	Present	51	20	50	170	148	32
30	SMT	1	5	12	3	Present	50	18	51	174	150	34
31	JYG	1	7	14	2	Present	53	18	49	168	144	33
32	SAS	1	5	11	2	Present	52	20	48	179	148	31
33	SBC	1	6	10	2	Present	53	18	50	170	145	32
34	SPC	1	5	12	4	Present	54	20	50	166	144	33
35	KVP	1	5	10	3	Present	51	18	51	178	148	34
36	SPB	1	7	12	2	Present	50	18	48	180	150	32
37	RAR	1	5	14	3	Present	53	20	49	168	142	31
38	NTK	1	7	11	2	Present	52	18	48	175	146	32
39	UAB	1	7	14	2	Present	51	18	51	170	144	34
40	JAK	1	5	11	3	Present	50	20	50	174	148	33
41	ARS	1	5	10	2							
42	SMC	1	7	12	2	Present	52	18	48	179	146	31
43	MSD	1	5	10	2	Present	53	20	50	170	144	32
44	GKN	1	5	12	4	Present	54	18	51	166	148	33
45	RSB	1	7	14	3	Present	51	18	50	178	150	32
46	CDC	1	6	12	2	Present	50	20	51	180	142	34
47	SAK	1	5	10	3	Present	53	18	48	179	146	33
48	ASR	1	7	12	2	Present	54	20	49	170	144	31
49	RSD	1	5	14	3	Present	51	18	48	166	148	32
50	SRP	1	7	11	2	Present	50	18	51	178	148	33

Table No 5

The Sonographic findings in Ayurvedic Treatment(DRUG) Group

				Six Week USG Report			12 Week USG Report		20 Weeks USG Report			
Sr. No	Initials	Outme	Wk of PL	Sac Size	Embryo Size	Heart activity	CRL	BPD	BPD	HC	AC	FL
51	LRM	1	5	14	2	Present	53	20	50	180	146	34
52	YVT	1	7	11	3	Present	52	18	48	168	148	33
53	SPS	1	5	10	2	Present	51	18	48	175	150	31
54	SVM	1	5	12	2	Present	50	20	50	170	144	32
55	SSC	1	7	11	3	Present	53	20	49	174	148	33
56	SSK	1	7	12	3	Present	52	18	48	168	145	34
57	PHS	1	5	11	2	Present	53	20	51	180	146	33
58	VSK	2	7	Pregnancy Loss, No cardiac activity								
59	SBC	1	6	14	2	Present	54	20	49	178	146	32
60	SSS	1	5	11	3	Present	51	18	48	172	148	35
61	UNK	1	5	10	2	Present	50	20	51	178	150	34
62	SKS	1	6	12	2	Present	53	18	50	180	144	32
63	SSP	1	7	10	2	Present	52	18	51	168	148	33
64	MTB	1	6	12	3	Present	51	20	50	175	145	32
65	RAP	1	7	14	2	Present	50	18	51	170	146	34
66	SAD	1	5	12	3	Present	53	18	48	174	146	33
67	RBD	1	7	10	2	Present	52	20	49	168	148	31
68	PDD	1	5	12	3	Present	53	20	48	180	150	32
69	SPV	1	5	14	2	Present	53	18	51	180	144	33
70	SPV	1	7	11	3	Present	52	18	50	168	148	34
71	KSS	1	5	12	3	Present	51	20	48	175	145	33
72	LSR	1	6	10	2	Present	50	20	48	170	146	31
73	MRB	1	5	12	3	Present	53	18	50	174	146	32
74	SRK	1	7	11	2	Present	52	18	49	168	144	33
75	SAP	1	5	12	3	Present	53	19	51		146	31

Table No 5

The Sonography findings in Ayurvedic Treatment(DRUG) Group

				Six Week USG Report			12 Week USG Report		20 Weeks USG Report			
Sr. No	**Initials**	**Outcome**	**Wk of PL**	**Sac Size**	**Embryo Size**	**Heart activity**	**CRL**	**BPD**	**BPD**	**HC**	**AC**	**FL**
77	MAG	1	5	10	2	Present	53	18	51	174	145	31
78	SKS	1	6	12	3	Present	52	20	48	168	145	33
79	ANG	1	7	14	2	Present	51	18	49	180	143	32
80	SPM	1	5	11	3	Present	50	18	48	180	147	34
81	SDG	1	6	14	2	Present	53	20	51	175	148	34
82	SAD	1	5	11	3	Present	53	20	50	170	148	33
83	ADC	1	5	10	3	Present	52	18	48	174	146	31
84	SAC	1	7	12	2	Present	53	18	48	168	144	32
85	VSJ	1	7	10	3	Present	53	20	50	179	148	30
86	STP	1	5	12	3	Present	52	20	51	170	150	32
87	MPS	1	6	14	2	Present	51	18	50	166	142	33
88	SNG	1	7	12	3	Present	50	18	48	178	146	31
89	RGB	1	5	12	2	Present	53	20	51	180	144	34
90	RTP	1	7	13	2	Present	51	20	52	176	147	34
92	PCR	1	6	11	3	Present	53	18	51	170	148	32
93	SBN	1	6	12	2	Present	55	20	49	166	144	35
94	STP	1	7	12	3	Present	51	20	51	178	142	32
95	RTG	2	5			Pregnancy Loss, No cardiac activity						
96	STC	1	6	11	3	Present	52	18	51	170	145	33
97	SPB	1	6	13	3	Present	53	18	52	174	150	31
98	RSB	1	7	11	3	Present	54	20	48	168	142	32
99	PTV	1	5	12	2	Present	52	20	54	179	146	33
100	VRT	1	6	11	3	Present	51	18	51	170	144	34

Table No 6

Table showing the Sonographic findings in Modern Treatment (CONTROL)Group

			Six Week USG Report			12 Week USG Report		20 Weeks USG Report			
Sr No	**Initials**	**Wk of PL**	**Sac Size**	**Embryo Size**	**Heart activity**	**CRL**	**BPD**	**BPD**	**HC**	**AC**	**FL**
1	DTH	5	12	3	Present	50	20	51	177	148	32
2	VBR	6	10	3	Present	51	18	51	172	144	32
3	BTR	6	12	2	Present	54	20	50	178	142	33
4	NDR	5	14	3	Present	52	19	50	170	148	32
5	BHT	5	11	2	Present	51	20	51	178	150	31
6	KLS	5	10	3	Present	50	20	49	180	152	33
7	MKL	7	12	2	Present	51	18	50	172	148	31
8	NDR	5		Pregnancy Loss, No cardiac activity seen							
9	BT	6	11	2	Present	53	18	51	178	152	33
10	HGM	5	10	3	Present	50	19	50	180	148	32
11	BTN	6		Pregnancy Loss, No cardiac activity seen							
12	SDR	7	12	2	Present	55	19	51	169	150	31
13	VRT	5	11	3	Present	52	20	50	172	154	33
14	MKL	5	13	3	Present	53	19	50	174	148	31
15	BHT	6	10	3	Present	50	20	51	180	146	32
16	BHU	6	12	3	Present	53	18	49	176	148	32
17	FRD	7	14	2	Present	50	20	51	170	144	31
18	SRV	5	11	3	Present	53	20	50	174	146	32
19	BHL	7	10	2	Present	50	18	50	170	142	32
20	KLA	5	12	3	Present	53	19	51	179	148	34
21	FRD	6		Pregnancy Loss, No cardiac activity seen							
22	DRN	5	11	2	Present	54	18	51	180	150	31
23	SRV	7	10	3	Present	52	20	51	169	144	34
24	HMN	7	12	2	Present	50	18	50	174	150	33
25	SAT	5		Pregnancy Loss, No cardiac activity seen							

Table No 6

Table showing the Sonographic findings in Modern Treatment (CONTROL)Group

			Six Week USG Report			12 Week USG Report		20 Weeks USG Report			
Sr No	**Initials**	**Wk of PL**	**Sac Size**	**Embryo Size**	**Heart activity**	**CRL**	**BPD**	**BPD**	**HC**	**AC**	**FL**
26	HTG	6	12	3	Present	51	19	51	178	148	34
27	CBN	5	11	2	Present	50	20	51	180	146	33
28	CBN	7	13	3	Present	51	18	48	175	147	34
29	NDR	5	10	2	Present	51	20	50	168	148	32
30	FRD	6	12	3	Present	54	20	51	174	151	34
31	KLH	5	14	3	Present	53	18	49	168	147	33
32	DDR	7	11	2	Present	52	20	48	179	150	31
33	DRN	5	10	3	Present	50	18	50	170	145	34
34	SDR	6	12	2	Present	54	18	48	172	144	33
35	BTR	5	10	3	Present	51	19	51	178	148	34
36	HMN	5	12	2	Present	53	19	48	178	150	32
37	SAT	7	14	3	Present	53	20	51	172	144	34
38	KPF	5	11	2	Present	52	18	48	175	146	32
39	SDR	6	14	2	Present	51	20	51	174	144	34
40	MGM	5	11	3	Present	52	20	50	178	150	32
41	FCB	7	10	3	Present	53	20	48	168	148	31
42	MMK	5	12	2	Present	52	18	52	179	150	31
43	BNG	6	10	3	Present	50	20	50	172	144	32
44	SRD	5	12	4	Present	54	20	51	166	151	33
45	SRD	7	14	3	Present	51	18	50	178	150	32
46	PKL	5	12	2	Present	50	20	51	180	142	34
47	VBR	6	10	3	Present	50	18	50	179	146	33
48	FRD	5	12	2	Present	51	20	49	170	144	34
49	VRT	7	14	3	Present	51	18	50	166	150	32
50	NDR	6	11	2	Present	50	20	51	178	148	33

Table No 6

Table showing the Sonographic findings in Modern Treatment (CONTROL)Group

			Six Week USG Report			12 Week USG Report		20 Weeks USG Report			
Sr No	**Initials**	**Wk of PL**	**Sac Size**	**Embryo Size**	**Heart activity**	**CRL**	**BPD**	**BPD**	**HC**	**AC**	**FL**
51	SDR	5	14	3	Present	50	20	50	176	146	34
52	SRV	6	11	3	Present	52	18	48	168	146	33
53	MGM	5	10	2	Present	51	19	52	175	150	31
54	BHU	7	12	2	Present	52	18	50	170	144	33
55	SRD	7	11	2	Present	53	20	49	174	150	33
56	CBN	5	12	3	Present	52	18	50	172	145	34
57	DRN	6	11	3	Present	50	20	51	180	150	33
58	MDS	5		Pregnancy Loss, No cardiac activity seen							
59	KLH	7	14	3	Present	54	18	49	178	146	32
60	KPF	7	11	3	Present	51	19	52	170	148	35
61	BNG	5	10	2	Present	53	20	51	178	150	34
62	FRD	6	12	3	Present	51	20	50	178	144	35
63	ANG	6	10	2	Present	52	18	51	168	142	33
64	FCB	5	12	3	Present	50	20	50	175	145	34
65	FRD	7	14	3	Present	50	20	51	170	146	34
66	KLH	5	12	3	Present	53	19	50	174	146	35
67	BHU	6	10	2	Present	52	20	49	170	148	31
68	PKL	5	12	2	Present	52	18	48	180	150	32
69	FCB	5	14	2	Present	53	20	51	180	150	35
70	MKL	7	11	3	Present	52	18	50	174	148	34
71	MK	6	12	3	Present	51	20	51	175	145	31
72	DDR	5	10	3	Present	54	20	48	170	146	33
73	SRV	7	12	3	Present	52	18	50	174	146	32
74	BTR	5	11	2	Present	52	20	49	168	144	33
75	HGM	5	12	2	Present	53	19	51	172	142	31

Table No 6
Table showing the Sonographic findings in Modern Treatment (CONTROL) Group

			Six Week USG Report			12 Week USG Report		20 Weeks USG Report			
Sr No	**Initials**	**Wk of PL**	**Sac Size**	**Embryo Size**	**Heart activity**	**CRL**	**BPD**	**BPD**	**HC**	**AC**	**FL**
				Pregnancy Loss, No cardiac activity seen							
77	KLA	5	10	2	Present	50	18	51	174	150	31
78	HGM	6	12	3	Present	52	20	48	170	142	32
79	BTR	7	14	3	Present	50	19	49	180	150	32
80	SR	6	11	3	Present	50	18	50	180	144	33
81	CJP	7	14	2	Present	50	20	51	175	148	33
82	KLA	5	11	3	Present	53	20	50	170	150	32
83	SRD	5	10	3	Present	51	18	52	171	146	31
84	SRD	7	12	3	Present	53	18	48	168	144	32
85	MGM	6	10	3	Present	53	20	50	179	148	33
86	MMK	5	12	3	Present	52	20	51	170	150	33
87	PKL	6	14	2	Present	54	18	50	166	142	31
88	KLS	5	12	2	Present	50	18	49	178	146	32
89	PKL	7	12	2	Present	53	20	51	176	150	34
90	CJP	6	13	2	Present	54	19	52	176	147	32
91	FRD	5		Pregnancy Loss, No cardiac activity seen							
92	BNT	5	11	2	Present	51	18	51	170	148	32
93	SAT	7	12	2	Present	50	20	49	171	144	33
94	VRT	5	12	3	Present	52	20	51	178	150	32
95	DTH	6		Pregnancy Loss, No cardiac activity seen							
96	BNG	5	11	2	Present	50	18	51	170	145	33
97	CJP	5	13	2	Present	53	19	52	174	150	35
98	HTG	5	11	3	Present	51	20	50	170	142	32
99	BNT	5	12	3	Present	52	20	54	179	146	33
100	CJP	7	11	3	Present	53	19	51	167	150	31

Table no 9

Table showing the symptoms on Day 15 in CONTROL group

Sr. No	Wt	Initials	Back Pain	Colicky pain	Spotting	L.O.C	Fear	Enrolled Wk	Outcome
1	48	DTH	Not Improved	Partially Improved	Not Improved	Not Improved	Not Improved	5	6
2	55	HMN	Not Improved	Not Improved	Not Improved	Not Improved	Not Improved	6	7
3	52	KLA	Not Improved	Partially Improved	Partially Improved	Not Improved	Partially Improved	6	Continued
4	58	SRD	Not Improved	Partially Improved	Partially Improved	Partially Improved	Partially Improved	5	Continued
5	45	BT	Not Improved	Not Improved	Not Improved	Not Improved	Not Improved	5	9
6	65	FRD	Not Improved	Not Improved	Not Improved	Partially Improved	Not Improved	5	6
7	72	CBN	Not Improved	Not Improved	Partially Improved	Not Improved	Partially Improved	7	7
8	74	MGM	Not Improved	Not Improved	Partially Improved	Improved	Partially Improved	5	Continued
9	53	SAT	Not Improved	Partially Improved	Partially Improved	Not Improved	Not Improved	6	7
10	64	KLH	Not Improved	Partially Improved	Partially Improved	Improved	Not Improved	5	Continued
11	54	HGM	Not Improved	Not Improved	Not Improved	Not Improved	Not Improved	6	7
12	60	BNT	Partially Improved	Improved	Improved	Not Improved	Not Improved	7	Continued
13	58	FCB	Not Improved	Partially Improved	Partially Improved	Not Improved	Not Improved	5	Continued
14	64	BHU	Partially Improved	Partially Improved	Partially Improved	Not Improved	Not Improved	5	Continued
15	56	SR	Partially Improved	Not Improved	Not Improved	Partially Improved	Partially Improved	6	9
16	54	VRT	Not Improved	Partially Improved	Partially Improved	Partially Improved	Not Improved	6	continued
17	58	MKL	Not Improved	Improved	Improved	Not Improved	Improved	7	Continued
18	63	KPF	Partially Improved	Improved	Improved	Not Improved	Not Improved	5	Continued
19	46	DRN	Not Improved	Partially Improved	Partially Improved	Not Improved	Not Improved	7	8
20	56	MK	Not Improved	Partially Improved	Partially Improved	Not Improved	Not Improved	5	Continued
21	66	KLS	Not Improved	Not Improved	Not Improved	Partially Improved	Partially Improved	6	13
22	64	VBR	Partially Improved	Not Improved	Improved	Not Improved	Not Improved	5	Continued
23	53	HTG	Not Improved	Partially Improved	Partially Improved	Not Improved	Not Improved	7	Continued
24	45	DDR	Not Improved	Partially Improved	Partially Improved	Not Improved	Partially Improved	7	Continued
25	55	BNG	Not Improved	Not Improved	Partially Improved	Not Improved	Not Improved	5	Continued

Table no 9

Table showing the symptoms on Day 15 in CONTROL group

Sr. No	Wt	Initials	Back Pain	Colicky pain	Spotting	L.O.C	Fear	Enrolled Wk	Outcome
26	42	NDR	Partially Improved	Partially Improved	Improved	Not Improved	Not Improved	6	Continued
27	54	SDR	Not Improved	Improved	Partially Improved	Not Improved	Not Improved	5	Continued
28	38	CJP	Partially Improved	Partially Improved	Partially Improved	Not Improved	Partially Improved	7	Continued
29	48	PKL	Not Improved	Partially Improved	Improved	Not Improved	Improved	5	10
30	55	FRD	Not Improved	Partially Improved	Improved	Improved	Not Improved	6	Continued
31	46	SRV	Partially Improved	Partially Improved	Partially Improved	Partially Improved	Not Improved	5	Continued
32	55	BTR	Partially Improved	Not Improved	Not Improved	Not Improved	Partially Improved	7	8
33	65	NDR	Partially Improved	Not Improved	Partially Improved	Partially Improved	Partially Improved	5	Continued
34	54	SDR	Not Improved	Partially Improved	Partially Improved	Partially Improved	Not Improved	6	continued
35	59	CJP	Improvement	Partially Improved	Partially Improved	Not Improved	Not Improved	5	Continued
36	54	PKL	Partially Improved	Not Improved	Partially Improved	Not Improved	Not Improved	5	Continued
37	55	FRD	Partially Improved	Partially Improved	Partially Improved	Not Improved	Not Improved	7	Continued
38	48	SRV	Partially Improved	Not Improved	Not Improved	Not Improved	Not Improved	5	Continued
39	56	BTR	Partially Improved	Partially Improved	Partially Improved	Improved	Not Improved	6	Continued
40	48	DTH	Not Improved	Not Improved	Partially Improved	Partially Improved	Not Improved	5	Continued
41	65	HMN	Not Improved	Not Improved	Partially Improved	Not Improved	Not Improved	7	Continued
42	53	KLA	Not Improved	Partially Improved	Improved	Not Improved	Not Improved	5	Continued
43	46	SRD	Partially Improved	Not Improved	Partially Improved	Partially Improved	Not Improved	6	Continued
44	52	BHT	Partially Improved	Not Improved	Not Improved	Improved	Not Improved	5	Continued
45	50	FRD	Improved	Partially Improved	Partially Improved	Improved	Not Improved	7	Continued
46	58	CBN	Partially Improved	Not Improved	Partially Improved	Partially Improved	Not Improved	5	Continued
47	51	MGM	Partially Improved	Not Improved	Partially Improved	Not Improved	Partially Improved	6	Continued
48	44	SAT	Partially Improved	Not Improved	Partially Improved	Not Improved	Not Improved	5	7
49	56	KLH	Partially Improved	Partially Improved	Partially Improved	Partially Improved	Not Improved	7	Continued
50	50	HGM	Partially Improved	Not Improved	Partially Improved	Not Improved	Not Improved	6	Continued

Table no 9

Table showing the symptoms on Day 15 in CONTROL group

Sr. No	Wt	Initials	Back Pain	Colicky pain	Spotting	L.O.C	Fear	Enrolled Wk	Outcome
51	65	BNT	Partially Improved	Partially Improved	Partially Improved	Not Improved	Partially Improved	5	Continued
52	62	FCB	Partially Improved	Partially Improved	Improved	Partially Improved	Not Improved	6	Continued
53	66	BHU	Partially Improved	Not Improved	Partially Improved	Partially Improved	Not Improved	5	Continued
54	49	SRD	Not Improved	Partially Improved	Partially Improved	Not Improved	Not Improved	7	Continued
55	57	VRT	Improved	Partially Improved	Partially Improved	Partially Improved	Not Improved	7	Continued
56	60	MKL	Not Improved	Not Improved	Partially Improved	Improved	Not Improved	5	Continued
57	52	KPF	Partially Improved	Not Improved	Partially Improved	Partially Improved	Not Improved	6	Continued
58	45	DRN	Partially Improved	Partially Improved	Improved	Not Improved	Partially Improved	5	Continued
59	66	MMK	Not Improved	Not Improved	Partially Improved	Partially Improved	Partially Improved	7	Continued
60	71	KLS	Not Improved	Partially Improved	Partially Improved	Partially Improved	Partially Improved	7	Continued
61	53	VBR	Partially Improved	Not Improved	Partially Improved	Not Improved	Not Improved	5	Continued
62	55	HTG	Partially Improved	Not Improved	Improved	Not Improved	Not Improved	6	Continued
63	49	DDR	Not Improved	Not Improved	Not Improved	Not Improved	Improved	6	8
64	51	BNG	Not Improved	Not Improved	Partially Improved	Not Improved	Not Improved	5	Continued
65	52	MDS	Not Improved	Not Improved	Partially Improved	Not Improved	Not Improved	7	Continued
66	59	ANG	Partially Improved	Improved	Improved	Not Improved	Not Improved	5	Continued
67	62	KLA	Not Improved	Not Improved	Partially Improved	Not Improved	Not Improved	6	Continued
68	51	SRD	Not Improved	Partially Improved	Partially Improved	Not Improved	Not Improved	5	Continued
69	54	BHT	Not Improved	Not Improved	Partially Improved	Not Improved	Not Improved	5	Continued
70	62	FRD	Not Improved	Partially Improved	Not Improved	Not Improved	Partially Improved	7	Continued
71	69	CBN	Not Improved	Not Improved	Not Improved	Not Improved	Partially Improved	6	Continued
72	61	MGM	Not Improved	Not Improved	Not Improved	Not Improved	Not Improved	5	Continued
73	65	SAT	Partially Improved	Improved	Not Improved	Not Improved	Not Improved	7	Continued
74	53	KLH	Not Improved	Not Improved	Not Improved	Not Improved	Not Improved	5	Continued
75	58	HGM	Improved	Partially Improved	Partially Improved	Not Improved	Partially Improved	5	Continued

Table no 9

Table showing the symptoms on Day 15 in CONTROL group

Sr. No	Wt	Initials	Back Pain	Colicky pain	Spotting	L.O.C	Fear	Enrolled Wk	Outcome
76	64	BNT	Partially Improved	Not Improved	Partially Improved	Partially Improved	Partially Improved	6	Continued
77	69	FCB	Not Improved	Partially Improved	Partially Improved	Partially Improved	Not Improved	5	Continued
78	53	BHU	Partially Improved	Partially Improved	Improved	Partially Improved	Not Improved	6	Continued
79	49	SRD	Not Improved	Not Improved	Partially Improved	Improved	Partially Improved	7	Continued
80	52	VRT	Partially Improved	Partially Improved	Partially Improved	Partially Improved	Not Improved	6	Continued
81	51	MKL	Not Improved	Not Improved	Not Improved	Partially Improved	Not Improved	7	Continued
82	64	KPF	Not Improved	Not Improved	Not Improved	Not Improved	Improved	5	Continued
83	58	DRN	Partially Improved	Improved	Not Improved	Not Improved	Improved	5	Continued
84	43	MMK	Partially Improved	Not Improved	Not Improved	Not Improved	Not Improved	7	Continued
85	54	BNG	Improved	Not Improved	Not Improved	Not Improved	Not Improved	6	Continued
86	56	NDR	Not Improved	Not Improved	Not Improved	Not Improved	Partially Improved	5	Continued
87	63	SDR	Not Improved	Partially Improved	Not Improved	Not Improved	Partially Improved	6	Continued
88	55	CJP	Partially Improved	Not Improved	Not Improved	Not Improved	Not Improved	5	Continued
89	58	PKL	Not Improved	Partially Improved	Not Improved	Not Improved	Not Improved	7	Continued
90	62	FRD	Not Improved	Not Improved	Not Improved	Not Improved	Not Improved	6	Continued
91	64	SRV	Partially Improved	Not Improved	Not Improved	Not Improved	Partially Improved	5	Continued
92	46	BTR	Not Improved	Improved	Not Improved	Not Improved	Not Improved	5	7
93	65	NDR	Not Improved	Not Improved	Not Improved	Not Improved	Not Improved	7	Continued
94	70	SDR	Partially Improved	Partially Improved	Partially Improved	Partially Improved	Not Improved	5	Continued
95	68	CJP	Improved	Not Improved	Not Improved	Not Improved	Not Improved	6	Continued
96	63	PKL	Not Improved	Not Improved	Partially Improved	Partially Improved	Not Improved	5	Continued
97	60	FRD	Not Improved	Partially Improved	Partially Improved	Partially Improved	Not Improved	5	Continued
98	58	SRV	Partially Improved	Improved	Partially Improved	Partially Improved	Not Improved	5	Continued
99	65	BTR	Not Improved	Partially Improved	Partially Improved	Partially Improved	Partially Improved	5	Continued
100	58	BHL	Partially Improved	Partially Improved	Not Improved	Not Improved	Partially Improved	7	Continued

Table No 10

Table showing the symptoms on Day 45in CONTROL group

Sr. No	Initials	Back Pain	Colicky pain	Spotting	Depression	Fear	Enrolled wk	Outcome
1	DTH			Pregnancy lost			5	6
2	HMN			Pregnancy lost			6	7
3	KLA	Partially	Partially Improved	Partially Improved	Improved	Partially Improved	6	Continued
4	SRD	Partially Improved	Improved	Improved	Partially Improved	Improved	5	Continued
5	BT			Pregnancy lost			5	9
6	FRD			Pregnancy lost			5	6
7	CBN			Pregnancy lost			7	7
8	MGM	Partially Improved	Partially Improved	Partially Improved	Partially Improved	Improved	5	Continued
9	SAT			Pregnancy lost			6	7
10	KLH	Partially Improved	Partially Improved	Not Improved	Improved	Partially Improved	5	Continued
11	HGM			Pregnancy lost			6	7
12	BNT	Partially Improved	Partially Improved	Improved	Improved	Not Improved	7	Continued
13	FCB	Partially Improved	Partially Improved	Improved	Partially Improved	Not Improved	5	Continued
14	BHU	Partially Improved	Improved	Partially Improved	Partially Improved	Improved	5	Continued
15	SR			Pregnancy lost			6	9
16	VRT	Improved	Partially Improved	Improved	Partially Improved	Partially Improved	6	continued
17	MKL	Partially Improved	Partially Improved	Partially Improved	Improved	Not Improved	7	Continued
18	KPF	Improved	Partially Improved	Partially Improved	Partially Improved	Partially Improved	5	Continued
19	DRN			Pregnancy lost				
20	MK	Partially Improved	Partially Improved	Partially Improved	Improved	Improved	5	Continued
21	KLS	Not Improved	Not Improved	Not Improved	Not Improved	Not Improved	6	13
22	VBR	Partially Improved	Partially Improved	Improved	Improved	Partially Improved	5	Continued
23	HTG	Improved	Improved	Partially Improved	Partially Improved	Improved	7	Continued
24	DDR	Not Improved	Partially Improved	Improved	Improved	Improved	7	Continued
25	BNG	Improved	Partially Improved	Partially Improved	Not Improved	Not Improved	5	Continued

Table No 10

Table showing the symptoms on Day 45in CONTROL group

Sr. No	Initials	Back Pain	Colicky pain	Spotting	Depression	Fear	Enrolled wk	Outcome
26	NDR	Partially Improved	Partially Improved	Partially Improved	Improved	Not Improved	6	Continued
27	SDR	Improved	Improved	Partially Improved	Not Improved	Improved	5	Continued
28	CJP	Improved	Partially Improved	Partially Improved	Improved	Improved	7	Continued
29	PKL	Not Improved	Not Improved	Not Improved	Not Improved	Partially Improved	5	10
30	FRD	Not Improved	Improved	Improved	Not Improved	Partially Improved	6	Continued
31	SRV	Improved	Improved	Partially Improved	Improved	Not Improved	5	Continued
32	BTR			pregnancy lost		Partially Improved	7	8
33	NDR	Not Improved	Not Improved	Partially Improved	Improved	Partially Improved	5	Continued
34	SDR	Improved	Improved	Partially Improved	Improved	Partially Improved	6	continued
35	CJP	Partially Improved	Partially Improved	Improved	Not Improved	Not Improved	5	Continued
36	PKL	Partially Improved	Partially Improved	Partially Improved	Improved	Not Improved	5	Continued
37	FRD	Partially Improved	Partially Improved	Partially Improved	Not Improved	Partially Improved	7	Continued
38	SRV	Partially Improved	Improved	Partially Improved	Improved	Partially Improved	5	Continued
39	BTR	Partially Improved	Partially Improved	Partially Improved	Improved	Not Improved	6	Continued
40	DTH	Partially Improved	Improved	Partially Improved	Partially Improved	Improved	5	Continued
41	HMN	Partially Improved	Partially Improved	Partially Improved	Not Improved	Not Improved	7	Continued
42	KLA	Not Improved	Partially Improved	Improved	Partially Improved	Not Improved	5	Continued
43	SRD	Improved	Partially Improved	Improved	Not Improved	Not Improved	6	Continued
44	BHT	Not Improved	Partially Improved	Improved	Not Improved	Improved	5	Continued
45	FRD	Partially Improved	Partially Improved	Partially Improved	Improved	Not Improved	7	Continued
46	CBN	Improved	Partially Improved	Partially Improved	Not Improved	Partially Improved	5	Continued
47	MGM	Improved	Not Improved	Partially Improved	Improved	Not Improved	6	Continued
48	SAT			pregnancy lost			5	7
49	KLH	Partially Improved	Partially Improved	Partially Improved	Improved	Not Improved	7	Continued
50	HGM	Improved	Partially Improved	Not Improved	Partially Improved	Improved	6	Continued

Table No 10

Table showing the symptoms on Day 45in CONTROL group

Sr. No.	Initials	Back Pain	Colicky pain	Spotting	Depression	Fear	Enrolled wk	Outcome
51	BNT	Improved	Not Improved	Partially Improved	Partially Improved	Partially Improved	5	Continued
52	FCB	Improved	Partially Improved	Improved	Partially Improved	Partially Improved	6	Continued
53	BHU	Not Improved	Not Improved	Improved	Improved	Not Improved	5	Continued
54	SRD	Improved	Partially Improved	Partially Improved	Partially Improved	Not Improved	7	Continued
55	VRT	Partially Improved	Partially Improved	Improved	Improved	Partially Improved	7	Continued
56	MKL	Partially Improved	Not Improved	Partially Improved	Partially Improved	Improved	5	Continued
57	KPF	Partially Improved	Partially Improved	Partially Improved	Partially Improved	Not Improved	6	Continued
58	DRN	Partially Improved	Not Improved	Improved	Partially Improved	Partially Improved	5	Continued
59	MMK	Partially Improved	Partially Improved	Partially Improved	Partially Improved	Not Improved	7	Continued
60	KLS	Partially Improved	Partially Improved	Improved	Partially Improved	Not Improved	7	Continued
61	VBR	Partially Improved	Partially Improved	Improved	Partially Improved	Improved	5	Continued
62	HTG	Improved	Partially Improved	Improved	Partially Improved	Not Improved	6	Continued
63	DDR			pregnancy lost		Not Improved	6	8
64	BNG	Not Improved	Not Improved	Partially Improved	Partially Improved	Not Improved	5	Continued
65	MDS	Partially Improved	Partially Improved	Improved	Improved	Not Improved	7	Continued
66	ANG	Partially Improved	Partially Improved	Improved	Partially Improved	Improved	5	Continued
67	KLA	Improved	Partially Improved	Improved	Partially Improved	Not Improved	6	Continued
68	SRD	Not Improved	Improved	Improved	Improved	Not Improved	5	Continued
69	BHT	Partially Improved	Partially Improved	Improved	Partially Improved	Partially Improved	5	Continued
70	FRD	Partially Improved	Partially Improved	Partially Improved	Partially Improved	Partially Improved	7	Continued
71	CBN	Partially Improved	Partially Improved	Improved	Partially Improved	Partially Improved	6	Continued
72	MGM	Improved	Partially Improved	Improved	Partially Improved	Not Improved	5	Continued
73	SAT	Partially Improved	Partially Improved	Improved	Improved	Improved	7	Continued
74	KLH	Partially Improved	Not Improved	Improved	Partially Improved	Improved	5	Continued
75	HGM	Not Improved	Improved	Partially Improved	Partially Improved	Not Improved	5	Continued

Table No 10

Table showing the symptoms on Day 45in CONTROL group

Sr. No	Initials	Back Pain	Colicky pain	Spotting	Depression	Fear	Enrolled wk	Outcome
76	BNT	Improved	Not Improved	Improved	Partially Improved	Partially Improved	6	Continued
77	FCB	Partially Improved	Partially Improved	Improved	Improved	Partially Improved	5	Continued
78	BHU	Improved	Improved	Partially Improved	Partially Improved	Not Improved	6	Continued
79	SRD	Not Improved	Partially Improved	Partially Improved	Partially Improved	Partially Improved	7	Continued
80	VRT	Partially Improved	Partially Improved	Improved	Not Improved	Not Improved	6	Continued
81	MKL	Partially Improved	Partially Improved	Improved	Partially Improved	Partially Improved	7	Continued
82	KPF	Partially Improved	Partially Improved	Improved	Partially Improved	Not Improved	5	Continued
83	DRN	Improved	Partially Improved	Partially Improved	Improved	Partially Improved	5	Continued
84	MMK	Improved	Partially Improved	Improved	Improved	Not Improved	7	Continued
85	BNG	Partially Improved	Partially Improved	Partially Improved	Partially Improved	Partially Improved	6	Continued
86	NDR	Improved	Partially Improved	Partially Improved	Partially Improved	Not Improved	5	Continued
87	SDR	Partially Improved	Not Improved	Improved	Partially Improved	Improved	6	Continued
88	CJP	Partially Improved	Improved	Improved	Not Improved	Not Improved	5	Continued
89	PKL	Not Improved	Partially Improved	Improved	Partially Improved	Partially Improved	7	Continued
90	FRD	Partially Improved	Partially Improved	Improved	Partially Improved	Partially Improved	6	Continued
91	SRV	Partially Improved	Partially Improved	Improved	Improved	Not Improved	5	Continued
92	BTR	Partially Improved	Partially Improved	pregnancy lost	Not Improved	Partially Improved	5	7
93	NDR	Partially Improved	Partially Improved	Improved	Partially Improved	Not Improved	7	Continued
94	SDR	Partially Improved	Partially Improved	Improved	Improved	Partially Improved	5	Continued
95	CJP	Partially Improved	Partially Improved	Improved	Not Improved	Not Improved	6	Continued
96	PKL	Partially Improved	Partially Improved	Partially Improved	Partially Improved	Improved	5	Continued
97	FRD	Partially Improved	Partially Improved	Partially Improved	Partially Improved	Partially Improved	5	Continued
98	SRV	Improved	Partially Improved	Improved	Not Improved	Partially Improved	5	Continued
99	BTR	Partially Improved	Improved	Improved	Partially Improved	Not Improved	5	Continued
100	BHL	Improved	Improved	Improved	Partially Improved	Improved	7	Continued

Table No 11

Table showing the symptoms on Day 15in DRUG group

Sr No	Initials	Back Pain	Colicky Pain	Spotting	Depression	Fear	Enrolled Wk	Outcome
1	SNK	Not Improved	Partially	Not Improved	Not Improved	Not Improved	5	Continued
2	SSB	Not Improved	Not Improved	Partially Improved	Not Improved	Not Improved	6	Continued
3	MSS	Partially Improved	Partially	Improved	Partially Improved	Not Improved	5	Continued
4	SKS	Not Improved	Not Improved	Improved	Not Improved	Not Improved	6	Continued
5	ASD	Partially Improved	Not Improved	Not Improved	Partially Improved	Partially Improved	7	Continued
6	SPG	Not Improved	Partially	Not Improved	Not Improved	Partially Improved	5	Continued
7	TSN	Not Improved	Partially	Not Improved	Not Improved	Not Improved	6	Continued
8	JPN	Not Improved	Partially	Not Improved	Not Improved	Not Improved	5	9
9	PPP	Not Improved	Not Improved	Partially Improved	Not Improved	Partially Improved	5	Continued
10	ADB	Not Improved	Partially	Not Improved	Not Improved	Not Improved	5	Continued
11	JSE	Partially Improved	Partially	Partially Improved	Partially Improved	Not Improved	7	13
12	SBK	Not Improved	Not Improved	Improved	Not Improved	Not Improved	5	Continued
13	SPG	Partially Improved	Partially	Improved	Partially Improved	Not Improved	5	Continued
14	SNT	Not Improved	Not Improved	Improved	Not Improved	Partially Improved	6	Continued
15	NTS	Not Improved	Partially	Not Improved	Not Improved	Improved	6	Continued
16	ASK	Not Improved	Partially	Partially Improved	Not Improved	Partially Improved	6	Continued
17	SNK	Not Improved	Not Improved	Not Improved	Not Improved	Not Improved	5	Continued
18	ADM	Partially Improved	Improved	Not Improved	Partially Improved	Partially Improved	7	Continued
19	PVC	Not Improved	Partially	Not Improved	Not Improved	Not Improved	5	Continued
20	KPP	Not Improved	Partially	Improved	Partially Improved	Not Improved	5	Continued
21	RCN	Not Improved	Not Improved	Partially Improved	Not Improved	Not Improved	6	7
22	DSK	Not Improved	Partially	Partially Improved	Partially Improved	Not Improved	6	Continued
23	PPG	Partially Improved	Improved	Partially Improved	Not Improved	Partially Improved	5	Continued
24	SRK	Partially Improved	Partially	Improved	Not Improved	Partially Improved	6	Continued
25	SBN	Not Improved	Not Improved	Not Improved	Not Improved	Not Improved	7	9

Table No 11

Table showing the symptoms on Day 15in DRUG group

Sr No	Initials	Back Pain	Colicky Pain	Spotting	Depression	Fear	Enrolled Wk	Outcome
26	SBG	Partially Improved	Partially	Partially Improved	Partially Improved	Improved	5	Continued
27	TSP	Not Improved	Improved	Improved	Not Improved	Partially Improved	6	Continued
28	SMM	Partially Improved	Not Improved	Improved	Partially Improved	Partially Improved	7	Continued
29	CRK	Not Improved	Partially	Improved	Not Improved	Improved	5	Continued
30	SMT	Not Improved	Not Improved	Partially Improved	Not Improved	Not Improved	5	Continued
31	JYG	Not Improved	Not Improved	Improved	Partially Improved	Not Improved	7	Continued
32	SAS	Partially Improved	Improved	Partially Improved	Not Improved	Not Improved	5	Continued
33	SBC	Not Improved	Partially	Improved	Not Improved	Not Improved	6	Continued
34	SPC	Partially Improved	Improved	Partially Improved	Not Improved	Partially Improved	5	Continued
35	KVP	Not Improved	Partially	Improved	Not Improved	Partially Improved	5	Continued
36	SPB	Not Improved	Partially	Partially Improved	Improved	Improved	7	Continued
37	RAR	Partially Improved	Partially	Partially Improved	Not Improved	Partially Improved	5	Continued
38	NTK	Not Improved	Partially	Partially Improved	Not Improved	Not Improved	7	Continued
39	UAB	Not Improved	Not Improved	Not Improved	Partially Improved	Not Improved	7	Continued
40	JAK	Improved	Not Improved	Partially Improved	Not Improved	Not Improved	5	Continued
41	ARS	Not Improved	Partially	Not Improved	Partially Improved	Not Improved	5	Continued
42	SMC	Partially Improved	Not Improved	Partially Improved	Improved	Not Improved	7	Continued
43	MSD	Not Improved	Improved	Partially Improved	Not Improved	Partially Improved	5	Continued
44	GKN	Partially Improved	Improved	Not Improved	Not Improved	Not Improved	5	Continued
45	RSB	Not Improved	Partially	Partially Improved	Partially Improved	Not Improved	7	Continued
46	CDC	Not Improved	Not Improved	Improved	Not Improved	Not Improved	6	Continued
47	SAK	Improved	Not Improved	Improved	Partially Improved	Partially Improved	5	Continued
48	ASR	Not Improved	Partially	Partially Improved	Not Improved	Not Improved	7	Continued
49	RSD	Not Improved	Improved	Partially Improved	Partially Improved	Improved	5	Continued
50	SRP	Not Improved	Not Improved	Not Improved	Not Improved	Improved	7	Continued

Table No 11

Table showing the symptoms on Day 15in DRUG group.

Sr No	Initials	Back Pain	Colicky Pain	Spotting	Depression	Fear	Enrolled Wk	Outcome
51	LRM	Improved	Partially	Improved	Partially Improved	Partially Improved	5	Continued
52	YVT	Not Improved	Partially	Partially Improved	Not Improved	Not Improved	7	Continued
53	SPS	Not Improved	Partially	Not Improved	Not Improved	Partially Improved	5	Continued
54	SVM	Not Improved	Partially	Partially Improved	Not Improved	Not Improved	5	Continued
55	SSC	Not Improved	Partially	Improved	Partially Improved	Not Improved	7	Continued
56	SSK	Not Improved	Not Improved	Not Improved	Partially Improved	Partially Improved	7	Continued
57	PHS	Improved	Not Improved	Not Improved	Not Improved	Improved	5	Continued
58	VSK	Not Improved	Not Improved	Improved	Not Improved	Not Improved	7	7
59	SBC	Not Improved	Not Improved	Not Improved	Partially Improved	Partially Improved	6	Continued
60	SSS	Not Improved	Not Improved	Partially Improved	Not Improved	Improved	5	Continued
61	UNK	Partially Improved	Improved	Not Improved	Not Improved	Partially Improved	5	Continued
62	SKS	Not Improved	Partially	Partially Improved	Partially Improved	Not Improved	6	Continued
63	SSP	Not Improved	Partially	Partially Improved	Partially Improved	Not Improved	7	Continued
64	MTB	Not Improved	Partially	Improved	Improved	Partially Improved	6	Continued
65	RAP	Improved	Partially	Not Improved	Partially Improved	Partially Improved	7	Continued
66	SAD	Not Improved	Partially	Not Improved	Partially Improved	Partially Improved	5	Continued
67	RBD	Partially Improved	Partially	Not Improved	Partially Improved	Improved	7	Continued
68	PDD	Partially Improved	Partially	Partially Improved	Improved	Partially Improved	5	Continued
69	SPV	Not Improved	Improved	Improved	Partially Improved	Partially Improved	5	Continued
70	SPV	Not Improved	Partially	Partially Improved	Improved	Not Improved	7	Continued
71	KSS	Partially Improved	Partially	Improved	Not Improved	Not Improved	5	Continued
72	LSR	Not Improved	Not Improved	Improved	Not Improved	Not Improved	6	Continued
73	MRB	Partially Improved	Improved	Improved	Partially Improved	Partially Improved	5	Continued
74	SRK	Not Improved	Partially	Partially Improved	Improved	Not Improved	7	Continued
75	SAP	Partially Improved	Not Improved	Partially Improved	Partially Improved	Not Improved	5	Continued

Table No 11

Table showing the symptoms on Day 15in DRUG group.

Sr No	Initials	Back Pain	Colicky Pain	Spotting	Depression	Fear	Enrolled Wk	Outcome
76	AHP	Not Improved	Partially	Partially Improved	Not Improved	Not Improved	5	14
77	MAG	Partially Improved	Partially	Not Improved	Not Improved	Partially Improved	5	Continued
78	SKS	Not Improved	Not Improved	Not Improved	Partially Improved	Not Improved	6	Continued
79	ANG	Not Improved	Partially	Improved	Partially Improved	Not Improved	7	Continued
80	SPM	Improved	Partially	Not Improved	Improved	Not Improved	5	Continued
81	SDG	Not Improved	Partially	Improved	Partially Improved	Improved	6	Continued
82	SAD	Not Improved	Partially	Not Improved	Partially Improved	Improved	5	Continued
83	ADC	Improved	Partially	Improved	Not Improved	Improved	5	Continued
84	SAC	Improved	Not Improved	Partially Improved	Partially Improved	Partially Improved	7	Continued
85	VSJ	Not Improved	Not Improved	Partially Improved	Partially Improved	Partially Improved	7	Continued
86	STP	Improved	Improved	Partially Improved	Not Improved	Not Improved	5	Continued
87	MPS	Not Improved	Improved	Not Improved	Partially Improved	Not Improved	6	Continued
88	SNG	Not Improved	Partially	Not Improved	Not Improved	Not Improved	7	9
89	RGB	Improved	Not Improved	Partially Improved	Partially Improved	Improved	5	Continued
90	RTP	Improved	Not Improved	Not Improved	Improved	Not Improved	7	Continued
91	NSD	Not Improved	Partially	Not Improved	Partially Improved	Improved	5	19
92	PCR	Not Improved	Not Improved	Partially Improved	Improved	Partially Improved	6	Continued
93	SBN	Partially Improved	Not Improved	Partially Improved	Improved	Partially Improved	6	Continued
94	STP	Not Improved	Not Improved	Improved	Improved	Partially Improved	7	Continued
95	RTG	Partially Improved	Not Improved	Not Improved	Not Improved	Not Improved	5	7
96	STC	Not Improved	Not Improved	Not Improved	Not Improved	Improved	6	Continued
97	SPB	Not Improved	Partially	Partially Improved	Improved	Not Improved	6	Continued
98	RSB	Partially Improved	Improved	Partially Improved	Partially Improved	Not Improved	7	Continued
99	PTV	Partially Improved	Improved	Partially Improved	Improved	Partially Improved	5	Continued
100	VRT	Not Improved	Improved	Improved	Improved	Improved	6	Continued
								PI = 9

Table No 12

Table showing the symptoms on Day 30in DRUG group

Sr. No	Initials	Back pain	Colicky pain	Spotting	Depression	Fear	Enrolled Wk	Outcome
1	SNK	Partially Improved	Partially Improved	Not Improved	Partially Improved	Not Improved	5	Continued
2	SSB	Partially Improved	Not Improved	Partially	Improved	Not Improved	6	Continued
3	MSS	Partially Improved	Improved	Improved	Not Improved	Partially Improved	5	Continued
4	SKS	Improved	Partially Improved	Improved	Not Improved	Partially Improved	6	Continued
5	ASD	Partially Improved	Partially Improved	Partially	Partially Improved	Partially Improved	7	Continued
6	SPG	Partially Improved	Improved	Improved	Partially Improved	Partially Improved	5	Continued
7	TSN	Not Improved	Improved	Partially	Partially Improved	Partially Improved	6	Continued
8	JPN	Not Improved	Not Improved	Not Improved	Not Improved	Not Improved	5	9
9	PPP	Partially Improved	Not Improved	Partially	Not Improved	Partially Improved	5	Continued
10	ADB	Improved	Partially Improved	Partially	Partially Improved	Partially Improved	5	Continued
11	JSE	Not Improved	Partially Improved	Partially	Not Improved	Not Improved	7	13
12	SBK	Partially Improved	Partially Improved	Improved	Partially Improved	Partially Improved	5	Continued
13	SPG	Improved	Improved	Improved	Improved	Improved	5	Continued
14	SNT	Partially Improved	Partially Improved	Improved	Partially Improved	Partially Improved	6	Continued
15	NTS	Partially Improved	Partially Improved	Improved	Partially Improved	Partially Improved	6	Continued
16	ASK	Not Improved	Improved	Partially	Improved	Improved	6	Continued
17	SNK	Partially Improved	Partially Improved	Improved	Improved	Improved	5	Continued
18	ADM	Not Improved	Partially Improved	Improved	Partially Improved	Partially Improved	7	Continued
19	PVC	Partially Improved	Improved	Partially	Partially Improved	Partially Improved	5	Continued
20	KPP	Partially Improved	Partially Improved	Partially	Partially Improved	Improved	5	Continued
21	RCN			pregnancy lost			6	7
22	DSK	Partially Improved	Not Improved	Partially	Not Improved	Partially Improved	6	Continued
23	PPG	Improved	Partially Improved	Improved	Partially Improved	Partially Improved	5	Continued
24	SRK	Partially Improved	Partially Improved	Improved	Partially Improved	Partially Improved	6	Continued
25	SBN	Not Improved	Improved	Not Improved	Not Improved	Not Improved	7	9

Table No 12

Table showing the symptoms on Day 30in DRUG group

Sr. No.	Initials	Back pain	Colicky pain	Spotting	Depression	Fear	Enrolled Wk	Outcome
26	SBG	Not Improved	Partially Improved	Partially	Partially Improved	Partially Improved	5	Continued
27	TSP	Partially Improved	Improved	Improved	Partially Improved	Improved	6	Continued
28	SMM	Partially Improved	Not Improved	Improved	Improved	Partially Improved	7	Continued
29	CRK	Improved	Improved	Improved	Not Improved	Partially Improved	5	Continued
30	SMT	Improved	Not Improved	Improved	Partially Improved	Not Improved	5	Continued
31	JYG	Not Improved	Not Improved	Improved	Partially Improved	Improved	7	Continued
32	SAS	Partially Improved	Partially Improved	Partially	Partially Improved	Improved	5	Continued
33	SBC	Improved	Partially Improved	Improved	Not Improved	Partially Improved	6	Continued
34	SPC	Improved	Partially Improved	Improved	Not Improved	Partially Improved	5	Continued
35	KVP	Partially Improved	Partially Improved	Improved	Partially Improved	Improved	5	Continued
36	SPB	Improved	Not Improved	Partially	Improved	Partially Improved	7	Continued
37	RAR	Partially Improved	Partially Improved	Improved	Improved	Partially Improved	5	Continued
38	NTK	Improved	Not Improved	Partially	Partially Improved	Improved	7	Continued
39	UAB	Partially Improved	Partially Improved	Partially	Partially Improved	Improved	7	Continued
40	JAK	Partially Improved	Not Improved	Partially	Partially Improved	Partially Improved	5	Continued
41	ARS	Improved	Partially Improved	Partially	Improved	Partially Improved	5	Continued
42	SMC	Improved	Partially Improved	Partially	Partially Improved	Improved	7	Continued
43	MSD	Improved	Not Improved	Partially	Improved	Improved	5	Continued
44	GKN	Partially Improved	Not Improved	Improved	Improved	Improved	5	Continued
45	RSB	Partially Improved	Not Improved	Partially	Improved	Improved	7	Continued
46	CDC	Partially Improved	Not Improved	Not Improved	Not Improved	Improved	6	Continued
47	SAK	Partially Improved	Partially Improved	Improved	Partially Improved	Partially Improved	5	Continued
48	ASR	Partially Improved	Partially Improved	Partially	Partially Improved	Partially Improved	7	Continued
49	RSD	Not Improved	Partially Improved	Improved	Partially Improved	Partially Improved	5	Continued
50	SRP	Partially Improved	Partially Improved	Improved	Partially Improved	Improved	7	Continued

Table No 12

Table showing the symptoms on Day 30in DRUG group

Sr No	Initials	Back pain	Colicky pain	Spotting	Depression	Fear	Enrolled Wk	Outcome
51	LRM	Partially Improved	Improved	Partially	Improved	Partially Improved	5	Continued
52	YVT	Improved	Not Improved	Partially	Improved	Partially Improved	7	Continued
53	SPS	Partially Improved	Partially Improved	Improved	Improved	Partially Improved	5	Continued
54	SVM	Partially Improved	Partially Improved	Improved	Partially Improved	Improved	5	Continued
55	SSC	Improved	Partially Improved	Partially	Not Improved	Partially Improved	7	Continued
56	SSK	Partially Improved	Not Improved	Improved	Partially Improved	Partially Improved	7	Continued
57	PHS	Improved	Not Improved	Improved	Partially Improved	Improved	5	Continued
58	VSK			pregnancy lost		0		7
59	SBC	Partially Improved	Not Improved	Partially	Partially Improved	Not Improved	6	Continued
60	SSS	Not Improved	Improved	Partially	Improved	Not Improved	5	Continued
61	UNK	Partially Improved	Partially Improved	Improved	Partially Improved	Partially Improved	5	Continued
62	SKS	Partially Improved	Not Improved	Partially	Partially Improved	Partially Improved	6	Continued
63	SSP	Partially Improved	Improved	Improved	Improved	Improved	7	Continued
64	MTB	Partially Improved	Improved	Improved	Improved	Not Improved	6	Continued
65	RAP	Partially Improved	Improved	Improved	Partially Improved	Partially Improved	7	Continued
66	SAD	Not Improved	Improved	Partially	Partially Improved	Partially Improved	5	Continued
67	RBD	Improved	Improved	Improved	Not Improved	Partially Improved	7	Continued
68	PDD	Partially Improved	Improved	Partially	Partially Improved	Improved	5	Continued
69	SPV	Not Improved	Improved	Improved	Partially Improved	Not Improved	5	Continued
70	SPV	Improved	Improved	Improved	Partially Improved	Not Improved	7	Continued
71	KSS	Partially Improved	Improved	Improved	Improved	Partially Improved	5	Continued
72	LSR	Improved	Improved	Improved	Partially Improved	Partially Improved	6	Continued
73	MRB	Partially Improved	Not Improved	Improved	Partially Improved	Improved	5	Continued
74	SRK	Not Improved	Partially Improved	Partially	Not Improved	Improved	7	Continued
75	SAP	Partially Improved	Partially Improved	Partially	Partially Improved	Not Improved	5	Continued

Table No 12

Table showing the symptoms on Day 30in DRUG group

Sr. No	Initials	Back pain	Colicky pain	Spotting	Depression	Fear	Enrolled Wk	Outcome
76	AHP	Not Improved	Not Improved	Partially	Partially Improved	Partially Improved	5	14
77	MAG	Improved	Partially Improved	Improved	Improved	Partially Improved	5	Continued
78	SKS	Improved	Improved	Partially	Not Improved	Not Improved	6	Continued
79	ANG	Not Improved	Partially Improved	Partially	Partially Improved	Improved	7	Continued
80	SPM	Partially Improved	Partially Improved	Partially	Not Improved	Improved	5	Continued
81	SDG	Not Improved	Partially Improved	Improved	Not Improved	Partially Improved	6	Continued
82	SAD	Partially Improved	Improved	Improved	Partially Improved	Not Improved	5	Continued
83	ADC	Not Improved	Improved	Improved	Partially Improved	Partially Improved	5	Continued
84	SAC	Partially Improved	Partially Improved	Partially	Improved	Partially Improved	7	Continued
85	VSJ	Partially Improved	Partially Improved	Partially	Partially Improved	Partially Improved	7	Continued
86	STP	Improved	Partially Improved	Partially	Improved	Improved	5	Continued
87	MPS	Improved	Improved	Not Improved	Partially Improved	Improved	6	Continued
88	SNG	Not Improved	Not Improved	Not Improved	Not Improved	Partially Improved	7	9
89	RGB	Not Improved	Not Improved	Partially	Partially Improved	Partially Improved	5	Continued
90	RTP	Partially Improved	Partially Improved	Partially	Partially Improved	Partially Improved	7	Continued
91	NSD	Not Improved	Partially Improved	Not Improved	Not Improved		5	19
92	PCR	Not Improved	Partially Improved	Partially	Partially Improved	Not Improved	6	Continued
93	SBN	Partially Improved	Not Improved	Partially	Partially Improved	Not Improved	6	Continued
94	STP	Improved	Partially Improved	Improved	Improved	Partially Improved	7	Continued
95	RTG	Not Improved	Not Improved	Not Improved	Not Improved	Not Improved	5	7
96	STC	Improved	Partially Improved	Partially	Improved	Improved	6	Continued
97	SPB	Not Improved	Not Improved	Partially	Improved	Partially Improved	6	Continued
98	RSB	Improved	Improved	Partially	Improved	Partially Improved	7	Continued
99	PTV	Not Improved	Not Improved	Improved	Partially Improved	Improved	5	Continued
100	VRT	Partially Improved	Improved	Improved	Partially Improved	Improved	6	Continued

Table No 13

Table showing the symptoms on Day 45in DRUG group.

Sr No	Initials	Back pain	Colicky pain	Spotting	L.O.C	Fear	Enrolled wk	Outcome
1	SNK	Improved	Improved	Improved	Improved	Not Improved	5	Continued
2	SSB	Not Improved	Partially Improved	Partially Improved	Improved	Partially Improved	6	Continued
3	MSS	Improved	Not Improved	Improved	Improved	Partially Improved	5	Continued
4	SKS	Improved	Improved	Improved	Not Improved	Improved	6	Continued
5	ASD	Partially Improved	Partially Improved	Partially Improved	Partially Improved	Partially Improved	7	Continued
6	SPG	Improved	Improved	Improved	Improved	Improved	5	Continued
7	TSN	Partially Improved	Improved	Partially Improved	Partially Improved	Partially Improved	6	Continued
8	JPN	Not Improved	Not Improved	Not Improved	Not Improved	Partially Improved	5	9
9	PPP	Improved	Not Improved	Partially Improved	Not Improved	Partially Improved	5	Continued
10	ADB	Improved	Improved	Improved	Improved	Partially Improved	5	Continued
11	JSE	Not Improved	Not Improved	Improved	Not Improved	Not Improved	7	13
12	SBK	Partially Improved	Partially Improved	Partially Improved	Partially Improved	Improved	5	Continued
13	SPG	Improved	Partially Improved	Improved	Partially Improved	Partially Improved	5	Continued
14	SNT	Improved	Partially Improved	Improved	Improved	Partially Improved	6	Continued
15	NTS	Improved	Improved	Improved	Improved	Not Improved	6	Continued
16	ASK	Improved	Improved	Improved	Not Improved	1	6	Continued
17	SNK	Improved	Partially Improved	Improved	Improved	Partially Improved	5	Continued
18	ADM	Partially Improved	Improved	Improved	Partially Improved	Partially Improved	7	Continued
19	PVC	Partially Improved	Improved	Partially Improved	Improved	Improved	5	Continued
20	KPP	Improved	Improved	Improved	Partially Improved	Improved	5	Continued
21	RCN			Pregnancy lost			6	7
22	DSK	Improved	Partially Improved	Partially Improved	Improved	Improved	6	Continued
23	PPG	Improved	Partially Improved	Improved	Partially Improved	Partially Improved	5	Continued
24	SRK	Improved	Partially Improved	Improved	Partially Improved	Partially Improved	6	Continued
25	SBN			Pregnancy lost			7	9

Table No 13

Table showing the symptoms on Day 45in DRUG group.

Sr No	Initials	Back pain	Colicky pain	Spotting	L.O.C	Fear	Enrolled wk	Outcome
26	SBG	Improved	Partially Improved	Partially Improved	Partially Improved	Improved	5	Continued
27	TSP	Improved	Partially Improved	Improved	Partially Improved	Partially Improved	6	Continued
28	SMM	Partially Improved	Improved	Improved	Improved	Partially Improved	7	Continued
29	CRK	Improved	Improved	Improved	Improved	Improved	5	Continued
30	SMT	Improved	Improved	Improved	Partially Improved	Partially Improved	5	Continued
31	JYG	Not Improved	Partially Improved	Improved	Partially Improved	Improved	7	Continued
32	SAS	Improved	Partially Improved	Improved	Partially Improved	Improved	5	Continued
33	SBC	Partially Improved	Improved	Improved	Partially Improved	Improved	6	Continued
34	SPC	Improved	Improved	Improved	Partially Improved	Partially Improved	5	Continued
35	KVP	Improved	Partially Improved	Improved	Partially Improved	Improved	5	Continued
36	SPB	Improved	Not Improved	Partially Improved	Improved	Improved	7	Continued
37	RAR	Improved	Improved	Improved	Improved	Partially Improved	5	Continued
38	NTK	Improved	Improved	Improved	Partially Improved	Improved	7	Continued
39	UAB	Improved	Improved	Improved	Partially Improved	Improved	7	Continued
40	JAK	Not Improved	Partially Improved	Improved	Partially Improved	Improved	5	Continued
41	ARS	Not Improved	Improved	Improved	Improved	Improved	5	Continued
42	SMC	Improved	Improved	Improved	Improved	Partially Improved	7	Continued
43	MSD	Improved	Partially Improved	Improved	Not Improved	Not Improved	5	Continued
44	GKN	Improved	Not Improved	Partially Improved	Partially Improved	Partially Improved	5	Continued
45	RSB	Not Improved	Not Improved	Improved	Partially Improved	Partially Improved	7	Continued
46	CDC	Partially Improved	Not Improved	Improved	Not Improved	Partially Improved	6	Continued
47	SAK	Improved	Improved	Partially Improved	Partially Improved	Improved	5	Continued
48	ASR	Partially Improved	Improved	Improved	Improved	Improved	7	Continued
49	RSD	Not Improved	Improved	Improved	Partially Improved	Improved	5	Continued
50	SRP	Improved	Improved	Improved	Partially Improved	Partially Improved	7	Continued

Table No 13

Table showing the symptoms on Day 45in DRUG group.

Sr No	Initials	Back pain	Colicky pain	Spotting	L.O.C	Fear	Enrolled wk	Outcome
51	LRM	Partially Improved	Improved	Partially Improved	Partially Improved	Partially Improved	5	Continued
52	YVT	Improved	Partially Improved	Improved	Not Improved	Partially Improved	7	Continued
53	SPS	Improved	Partially Improved	Improved	Improved	Improved	5	Continued
54	SVM	Partially Improved	Improved	Improved	Partially Improved	Improved	5	Continued
55	SSC	Improved	Partially Improved	Partially Improved	Partially Improved	Improved	7	Continued
56	SSK	Improved	Improved	Improved	Partially Improved	Improved	7	Continued
57	PHS	Improved	Improved	Improved	Partially Improved	Partially Improved	5	Continued
58	VSK			Pregnancy lost				7
59	SBC	Partially Improved	Partially Improved	Partially Improved	Partially Improved	Partially Improved	6	Continued
60	SSS	Partially Improved	Improved	Partially Improved	Improved	Partially Improved	5	Continued
61	UNK	Improved	Partially Improved	Improved	Partially Improved	Improved	5	Continued
62	SKS	Improved	Partially Improved	Improved	Partially Improved	Improved	6	Continued
63	SSP	Partially Improved	Improved	Improved	Partially Improved	Not Improved	7	Continued
64	MTB	Improved	Improved	Improved	Partially Improved	Improved	6	Continued
65	RAP	Partially Improved	Improved	Partially Improved	Improved	Improved	7	Continued
66	SAD	Improved	Improved	Improved	Improved	Improved	5	Continued
67	RBD	Improved	Improved	Partially Improved	Improved	Improved	7	Continued
68	PDD	Partially Improved	Partially Improved	Partially Improved	Partially Improved	Not Improved	5	Continued
69	SPV	Partially Improved	Improved	Improved	Improved	Partially Improved	5	Continued
70	SPV	Not Improved	Improved	Improved	Partially Improved	Partially Improved	7	Continued
71	KSS	Partially Improved	Improved	Improved	Improved	Partially Improved	5	Continued
72	LSR	Improved	Improved	Improved	Improved	Not Improved	6	Continued
73	MRB	Improved	Partially Improved	Improved	Partially Improved	Partially Improved	5	Continued
74	SRK	Not Improved	Partially Improved	Partially Improved	Improved	Partially Improved	7	Continued
75	SAP	Improved	Improved	Partially Improved	Improved	Partially Improved	5	Continued

Table No 13

Table showing the symptoms on Day 45in DRUG group.

Sr. No	Initials	Back pain	Colicky pain	Spotting	L.O.C	Fear	Enrolled wk	Outcome
76	AHP	Not Improved	Not Improved	Not Improved	Not Improved	Not Improved	5	14
77	MAG	Improved	Improved	Improved	Improved	Partially Improved	5	Continued
78	SKS	Improved	Improved	Partially Improved	Improved	Improved	6	Continued
79	ANG	Not Improved	Improved	Partially Improved	Improved	Improved	7	Continued
80	SPM	Improved	Partially Improved	Partially Improved	Partially Improved	Improved	5	Continued
81	SDG	Not Improved	Improved	Improved	Partially Improved	Partially Improved	6	Continued
82	SAD	Improved	Improved	Improved	Partially Improved	Not Improved	5	Continued
83	ADC	Not Improved	Improved	Improved	Partially Improved	Improved	5	Continued
84	SAC	Improved	Improved	Partially Improved	Improved	Improved	7	Continued
85	VSJ	Partially Improved	Improved	Not Improved	Not Improved	Improved	7	Continued
86	STP	Improved	Partially Improved	Not Improved	Not Improved	Partially Improved	5	Continued
87	MPS	Improved	Improved	Partially Improved	Partially Improved	Improved	6	Continued
88	SNG			Pregnanc y Lost			7	9
89	RGB	Improved	Partially Improved	Partially Improved	Partially Improved	Improved	5	Continued
90	RTP	Partially Improved	Improved	Improved	Improved	Improved	7	Continued
91	NSD	Not Improved	Not Improved	Not Improved	Not Improved	Improved	5	19
92	PCR	Improved	Improved	Partially Improved	Not Improved	Improved	6	Continued
93	SBN	Partially Improved	Improved	Improved	Improved	Partially Improved	6	Continued
94	STP	Improved	Partially Improved	Improved	Improved	Improved	7	Continued
95	RTG			Pregnancy Lost			5	7
96	STC	Improved	Partially Improved	Partially Improved	Improved	Improved	6	Continued
97	SPB	Improved	Improved	Improved	Improved	Improved	6	Continued
98	RSB	Improved	Improved	Partially Improved	Partially Improved	Improved	7	Continued
99	PTV	Partially Improved	Improved	Improved	Improved	Not Improved	5	Continued
100	VRT	Improved	Improved	Improved	Improved	Improved	6	Continued

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Sagbbeej

Vineeta Sareen*, Sunita Jain, Anita Narula, Phytotherapy Research Volume 9, Issue 2, pages 139–141, March 1995

Granthokta References: **AYURVEDIC DESCRIPTION (GARBHINI VYAKARAN):**

अत्थास्मै पंचविंशतिवर्षाय द्वादशवर्षा पत्नीमावहेत्
पित्र्यधर्मार्थकामप्रजा: प्राप्स्यतीति ।।
ऊनषोडशवर्षायामप्राप्त: पंचविंशतिम् ।
तद्यात्धत्तो पुमान गर्भं कुक्षिस्थ: स विपद्यते ।।
जातो वा न चिरं जीवेज्जीवेद्वा दुर्बलेन्द्रिय: ।
तस्मादत्यन्त बालायां गर्भाधानं न कारयेत् ।।
अतिवृद्धायां दीर्घरोगिण्यामन्येन वा
विकारेणोपसृष्टायां गर्भाधानम् नैव कुर्वीत ।
पुरुषस्याप्येवंविधस्य त एव दोषा: सम्भवन्ति ।।
तत्र पूर्वोक्तै: कारणै: पतिष्यति गर्भे
गर्भाशय कटीवंक्षणबस्तिशूलानि रक्तदर्शनं च ।।
तत्र शीतै: परिषेकावगाहप्रदेहादिभिरुपचरे–
ज्जीवनीयश्रृतक्षीरमुत्पलादिसिद्धं पाययेत ।।
प्रस्रंसमाने सदाहपार्श्वपृष्ठशूलासृग्दरा–
नाहमूत्रसंगास्थानात् स्थानं चोपक्रामति

गर्भे कोष्ठे संरम्भः, तत्र स्निग्ध शीताः क्रियाः ।।
वेदनायां महासहाक्षुद्रसहामधुकश्वदंष्ट्रा
कण्टकारिकासिद्धं पयः शर्कराक्षौद्र मिश्रं
पाययेत । मूत्रसंगे दर्भादिसिद्धम् । आनाहे
हिंगुसौवर्चललशुनवचा सिद्धम् ।।
अत्यर्थ स्रवते रक्ते कोष्ठागारिका ऽऽगार
मृत्पिण्डसमंगाधातकी कुसुमनवमालिका
गैरिकसर्जरसरसांजनचूर्णं मधुनाऽव लिह्यात्,
यथालाभं न्यग्रोधादित्वकप्रबालकल्कं वा
शृतेन पयसा, उदुम्बरफौलादककन्द क्काथेन
वा शर्करामधुधुरेण शालिपिष्टं, न्यग्रोधादि
स्वरस पीतं वा वस्त्रावयवं योन्यां धारयेत् ।।
अथादृष्टशोणितवेदनायां मधुकदेवदारु
मंजिष्ठापयस्यासिद्धं पयः पाययेत्,
तदेवाश्मन्तकशतावरीपयस्यासिद्धं
विदारिगंधाऽऽदिसिद्धं वा, बृहतीद्वयो–
त्पलशतावरीसारिवापयस्यामधुकसिद्धं
वा, एवं क्षिप्रमुपक्रान्ताया उपावर्त्तन्ते रुजो
गर्भश्चाप्य यते ।।
व्यवस्थिते च गर्भे गव्येनोडुम्बरशलाटुसिद्धेन
पयसा भिजयेत । अतीतेलवणस्नेहवर्ज्याभिर्यवागू–
भिरुद्दालकादीनां पाचनीयोपसंस्कृपाभिरुपक्रमेत
यावन्तो मासा गर्भस्य तावंत्यहानि । बस्त्युदर
शूलेषु पुराण गुडं दीपनीयसंयुक्तं पाययेदरिष्टं वा
वातोपद्रवगृहीतत्वात् स्रोतसां लीयये गर्भः,
सोऽति कालमवतिष्ठमानो व्यापद्यते, तां मृदुना
स्नेहादिक्रमेणोपचरेत, उत्क्रशरससंसिद्धामनल्प
स्नेहां यवागू पाययेत्, माषतिलबिल्वशलाटुसिद्धान वा
कुल्माषान भक्षयेन्मधुमाध्वीकं चानु पिबेत् सप्तरात्रम्
कालातीतस्थायिनि गर्भे विशेषतः सधान्यमुदूखलं
मुसलेनाभिहन्याद्विषमे वा यानासने सेवेत् ।।
वाताभिपन्न एवशुष्यति गर्भः, स मातुः कुक्षिं न पूरयति

मन्दं स्पंदते च, तं बृंहणीयै: पयोर्भिर्मासरसैश्चोपचरेत् ।।

शुक्र शोणितं वायुऽनाभिप्रपन्नमवक्रान्तजीवमाध्मा-
पयत्युदरं, तं कदाचित यदृच्छयोपशान्तं नैग
मेषापहृतमिति भाषन्ते, तमेव कदाचितप्रलीय मानं
नागोदरमित्याहु:, तत्रापि लीनवत् प्रतीकार: ।।
अत ऊर्ध्वं मासानुमासिकं वक्ष्याम: ।
मधुकं शाकबीजं च पयस्या सुरुदारु च
अश्मन्तकस्तिला: कृष्णास्ताम्रवल्ली शतावरी ।।
वृक्षादनी पयस्या च लता चोत्पलसारिवा
अनन्ता सारिवा रास्ना पद्मा मधुकमेव च ।।
ऋहत्यौ काश्मिरी चापि क्षीरशुंगास्त्वचो घृतम् ।
पृश्निपर्णी बला शिग्रु श्वदंष्ट्रा मधुपर्णिका ।।
शृंगाटकं विसं द्राक्षा कशेरु मधुकं सिता ।
वत्सैते सप्त योगा:स्युर्धश्लोकसमापना: ।।
यथासंख्यं प्रयोक्तव्या गर्भस्रावे पयोयुता: ।।
कपित्थबृहतीबिल्वपटोलेक्षुनिदिग्धिका
मूलानि क्षीरसिद्धानि पाययेदभिषगष्टमे ।।
नवमे मधुमानन्तापयस्यासारिवा: पिबेत् ।
क्षीरं शुण्ठीपयस्ताभ्यां सिद्धं स्यात् दशमे हितम ।।
सक्षीरा वा हिता मधुकं सुरदारु च ।
एवमाप्यायते गर्भतीब्रा? रुक चोपशाम्यति ।।
निवृत्तप्रसवायास्तु पुन्ह: षड्भ्यो वर्षभ्य ऊर्ध्वम्
प्रसवमानाया नार्या: कुमारोऽल्पायुर्भवति ।।
अथ गर्भिणीव्याध्युत्पत्तावत्येच्छर्दयेन्मधुराम्लेना-
न्नोपहितेनानुलोमयेच्च, संशमनीयं च मृदु
विध्यादन्नपानयो:, अश्नीयाच्च मृदुवीर्यं मधुरप्रायं
गर्भाविरुद्धं च, गर्भाविरुद्धाश्च क्रिया यथायोगं
विदधीत मृदुप्राया: ।।
सौवर्णं सुकृतं चूर्णं कुष्ठं मधु घृतं वचा ।
मत्स्याक्षक: शंखपुष्पी मधु सर्पि: सकांचनम ।।
अर्कपुष्पी मधुघृतं चूर्णितं कनकं वचा ।

हेमचूर्णानि कैडर्य: श्वेता दूर्वा घृतं मधु ।।
चत्वारोऽभिहिता: प्राशा: श्लोकाध्वेर्षु चतुर्ष्वपि ।
कुमाराणां वपुर्मेधाबलबुद्धिविवर्धना: ।।
सुश्रुत संहिता, शारीरस्थान १० / ५३-७०

गर्भ पोषण

मात्रादीनां खलु गर्भकारणां भावानां संपदस्तथा वृत्तस्य
सौष्ठवान्मातृतश्चैवोपस्नेहोपस्वेदाभ्यां कालपरिणामात् स्वभावसंसिद्धेश्च कुक्षौ वृद्धिं प्रप्नोति ।।

चरक शारीस्थान ४/४७

व्यपगतपिपासाबुभुक्षस्तु खलु गर्भ: परतंत्रवृत्तिर्मातरमाश्रित्य वर्तयत्युपस्नेहोपस्वेदाभ्यां गर्भाशये सद्सद्भूतांगावयव:, तदनंतरं ह्यस्य कश्चिल्लोमकूपायनैरुपस्नेह:
कश्चिन्नाभिनाड्ययनै: । नाभ्यां यस्य नाडी प्रसक्ता, नाड्यांचापरा, अपरा चास्य मातु: प्रसक्ता हृदये, मातृहृदयं ह्यस्य तामपरामभिसंप्लवते सिराभि: स्यंदमानाभि:, स तस्य रसो बलवर्णकर: संपद्यते, स च सर्वरसवानाहार: । स तेनाहारेणोपष्टब्ध:
(परतंत्रवृत्तिर्मातरमाश्रित्य) वर्तयंतर्गत: ।।

चरक शारीरस्थान ६/२३

निश्वासोच्छवाससंक्षोभस्वप्नान गर्भोऽधिगच्छति ।
मातुर्निश्वासितोच्छवासांक्षोभस्वप्नसम्भवान् ।।

सुश्रुत शारीस्थान २/५५

मातुस्तु खलु रसवहायां नाड्यां गर्भनाहिनाडी प्रतिबद्धा, सास्य
मातुराहाररसवीर्यमभिवहति । तेनोपस्नेहेनास्याभिवृद्धिर्भवति ।
असंजातांगप्रत्यंगप्रविभागमानिषेकात प्रभृति सर्वशरीरावयवानुसारिणानां रसवहानां तिर्य्यग्गतानां धमनीनामुपस्नेहो जीवयति ।।

सुश्रुत शारीरस्थान ३/३१

तत्रस्थितश्च गर्भो मातरि स्वपन्त्यां स्वपिति प्रबुद्धायां प्रबुध्यते । परतन्त्रवृत्तेश्च गर्भस्य । निषेकात्प्रभृतिगभीशयोपस्नेहोपस्वेदौ वर्तनम ।।
ततो व्यक्तीभवदंगप्रत्यंगस्याऽस्य नाभ्यां प्रतिबद्धा नाडीमाड्यमपरा तस्यां मातृहृदयम् । ततो मातृहृदयादाहाररसो धमनीभि: स्यंदमानोऽपरामुपैति । तत: क्रमानाभिम् । ततश्च स

पुनर्गर्भस्य पक्वाशये स्वकायाग्निना पच्यमानः प्रसादबाहुल्याद्धात्वादिपुष्टिकरः संपद्यते ।।
तथा रोमकूपैरुपस्नेहो ...।।

अष्टांग हृदय शारीरस्थान १/५६

मासानुमास गर्भ वृद्धिः

गर्भिणी परिचर्या

गर्भिणी प्रथम दिवसात् प्रभृति नित्यं प्रहृष्टा शुच्च्यलंकृता शुक्लवसना शान्तिमंगलदेवता ब्राह्मणगुरुपरा च भवेत्। मलिनविकृतहीन गात्राणि न सृशेत, दुर्गंधं दुर्दर्शनानि परिहरेत्, उद्वेजनीयाश्च कथाः शुष्कं पर्युषितं कुथितं क्लिन्नं चान्नं नोपभुंग्जीत, बहिर्निष्क्रमणं शून्यागारचैत्यश्मशानवृक्षाश्रयान् क्रोधमयशस्करांश्च भावानुच्चैर्भाष्यादिकं च परिहरेद्यानि च गर्भ व्यापदयंन्ति, न चाभीक्षणं तैलाभ्यंगोत्सादनादीनि सेवेत, न चायासयेच्छरीरं पूर्वोक्तानि च परिहरेत, शयनासनं मृद्वास्तरणं नात्युच्चमपाश्रययोपेत्मसंबाधं च विद्यात, हृद्यं द्रवमधुरप्रायं स्निग्धं दीपनीयसंस्कृतं च भोजनं भोजयेत, सामान्यमेतदाप्रतवात ।।

सुश्रुत शारीरस्थान १० / ३

गर्भोपघातकर भाव

तदा प्रभृति व्यवायं व्यायाममतितर्पणमतिकर्शनं दिवास्वप्नं रात्रिजागरणं शोकं यानावरोहणं भ्यमुत्कुटुकासनं चैकान्ततः स्नेहादिक्रियां शोणितमोक्षणं च काले वेगविधारणं च न सेवेत।

सुश्रुत शारीरस्थान ३/१६

प्रथम मासः (गर्भ स्वरूप)

स सर्वगुणवान् गर्भत्वमापन्नः प्रथमे मासि संमूर्च्छितः सर्वधातुकलुषीकृतः खेटभूतो भवत्यव्यक्तविग्रहः सदसदभूतांगवयवः।।चरक शारीरस्थान ४/९

तत्र प्रथमे मासि कललं जायते।। सुश्रुत शारीरस्थान ३/१८

तत्र प्रथमे मासि कललं जायते।। अष्टांग संग्रह शारीरस्थान २/१३

अव्यक्तः प्रथमे मासि सप्ताहात कलली भवेत्।।

अष्टांग हृदय शारीरस्थान १/३७

द्वितीय मास

द्वितीये मासि घनः संपद्यते पिण्डः पेश्यर्बुदं वा।

तत्र घनः पुरुषः, पेशी स्त्री, अर्बुदं नपुंसकम्।। चरक शारीरस्थान ४/१०

द्वितीये शीतोष्णानिलैरभिप्रपच्च्यमानानां महाभूतानां संघातो घन: संजायते, यदि पिण्ड: पुमान, स्त्री चेत पेशी. नपुंसकं चेदर्बुदमिति ।। सुश्रुत शारीस्थान ३/१८
द्वितीये घन: पेश्यर्बुदं वा तेभ्य: क्रमात्पुंस्त्रीनपुंसकानि । । अष्टांग संग्रह, शारीरस्थान २/१३
द्वितीये मासि कललाद्धन: पेश्यथवाऽर्बुदम ।। अष्टांग संग्रह, शारीरस्थान ४९
पुंस्त्रीक्लीबा: क्रमात्तेभ्य: .....

अष्टांग हृदय, शारीरस्थान १

तृतीय मास

तृतीये मासि सर्वेन्द्रियाणि सर्वांगावयवाश्च यौगपद्येनाभिनिर्वर्तन्ते ।।

चरक शारीरस्थान, ४/११

तृतीये हस्तपादशिरसं पंच पिण्डिका निवर्तन्ते अंगप्रत्यंगविभागाश्च सूक्षो भवति ।।

सुश्रुत शारीरस्थान ३/१८

तृतीये पंचधा प्ररोहति, तद्यथा सक्थिनी बाहू शिरश्च । सक्थ्यादिप्ररोहैककालमेव च सर्वांगावयवेन्द्रियाणि युगपत्सम्भवन्ति ।।

अष्टांग संग्रह, शारीस्थान २/१३

व्यक्ति भवति मासेऽस्य तृतीये गात्र पंचकम् ।।
मूर्धा द्वे सक्थिनीबाहू सर्वसूक्ष्मांगजन्म च ।
सर्वमेव हि मूर्धाद्यैज्ञानं च सुखदु:खयो ।।
अष्टांग हृदय शारीस्थान, १/५४-५५
तृतीये मासि युगपन्निर्वतन्ते यथाक्रमम् ।
प्रस्पन्दते चेतयति वेदनाश्चावबुध्यते ।।
सूक्ष्मप्रव्यक्तकरणस्तृतीये तु मनोऽधिक: ।।

काश्यप संहिता , शारीरस्थान, २/४-

चतुर्थ मास

चतुर्थे मासि स्थिरत्वमापद्यते गर्भ: -

चरक शारीरस्थान ४/२०

चतुर्थे सर्वांगप्रत्यंगविभाग: प्रव्यक्तो भवति, गर्भहृदयप्रव्यक्तिभावाच्चेतनाधातुरभिव्यक्तो भवति, कस्मात् ? तत्स्थानत्त्वात् ।।

सुश्रुत शारीरस्थान, ३/१८

चतुर्थे अंगप्रत्यंगविभाग: प्रव्यक्तो गर्भश्च स्थिरो भवति । ।

अष्टांग संग्रह, शारीरस्थान २/२२

चतुर्थे व्यक्तांगानां ..... ।।

अष्टांग हृदय, शारीस्थान १/५७

चतुर्थे स्थिरतां याति गर्भ: कुक्षौ निरामय: ।।

काश्यप संहिता, शारीरस्थान २/५

पंचम मास

पंचमे मासि गर्भस्य मांसशोणितोपचयो भवत्यधिकमन्येभ्यो मासेभ्य: ।।

चरक शारीरस्थान, ४/२१

पंचमे मन: प्रतिबुद्धतरं भवति ।

सुश्रुत शारीरस्थान, ३/३०

पंचमे मन: प्रतिबुद्धतरं भवति मांसशोणितोपचयश्च ।।

अष्टांग संग्रह, शारीरस्थान २/२३

.....चेतनायाश्च पंचमे ।

अष्टांग हृदय शारीरस्थान, १/५७

मांसशोणितवृद्धिस्तु पंचमे मासि जीवक ।।

काश्यप संहिता शारीरस्थान २/६

षष्ठ मास

षष्ठे मासि गर्भस्य बलवर्णोपचयो भवत्यधिकमन्येभ्यो मासेभ: ।।

चरक शारीरस्थान, ३/३०

षष्ठे बुद्धि: ।।

सुश्रुत शारीरस्थान, ३/३०

षष्ठे केशरोमनखास्थिस्नाय्वादीन्यभिव्यक्तानि बलवर्णोपचयश्च ।।

अष्टांग संग्रह, शारीरस्थान २/२४

षष्ठे बुद्धि:

सुश्रुत शारीरस्थान ३/३०

षष्ठे केशरोमनखास्थिस्नाय्वादीन्यभिव्यक्ताति बलवर्णोपचयश्च ।।

अष्टांग संग्रह, शारीस्थान २/२४

षष्ठे स्नायुसिरारोमबलवर्णनखत्वचाम ।।

अष्टांग हृदय शारीस्थान १/५७

बलवर्णौजसां वृद्धि: षष्ठेःए .....

काश्यप संहिता शारीरस्थान २/७

सप्तम मास

सप्तमे मासि गर्भ: सर्वैर्भावैराप्याय्यते ।

चरक शारीरस्थान, ४/२३

सप्तमे सर्वांगप्रत्यंगविभाग: प्रव्यक्ततर: ।।

सुश्रुत शारीरस्थान, ३/३०

सप्तमे सर्वांग संपूर्णता ।।

अष्टांग संग्रह, शारीरस्थान, २/२५

सर्वै: सर्वांगसंपूर्णो भवै: पुष्यति सप्तमे ।

अष्टांग हृदय, १/५८

सर्वधात्वंगसंपूर्णो वातपित्तकफान्वित: ।

सप्त्मए मासि ..... ।।

काश्यप संहिता,

शारीरस्थान, २/८

अष्टम मास

अष्टमे मासि गर्भश्च मातृतो गर्भतश्च माता रसहारिणीभि: संवाहिनीभिर्मुहुर्मुहुरोज: परस्परत आददाते गर्भस्यासंपूर्णत्वात् । तस्मातदा गर्भिणी मुहुर्मुहुर्मुदा युक्ता भवति मुहुर्मुहुश्च म्लाना, तथा गर्भ:, तस्मात्तदा गर्भस्य जन्म व्यापत्तिमद्भवत्योजसोऽनवस्थितत्वात् ।
तं चैवार्थमभिसमीक्ष्याष्टमं मासमगण्यिमत्याचक्षते कुशला: ।।

चरक शारीरस्थान, ४/२४

अष्टमेऽस्थिरीभवत्योज:,
तत्र जातश्चेन्न जीवेन्निरोजस्त्वानैएक्रतभागत्वाच्च ।।

सुश्रुत शारीरस्थान, ३/३०

अष्टमे गर्भश्च मातृतो गर्भतश्च माता
रसहारिणीभिर्वाहिनीभिर्मुहुर्मुहुरोज: परस्परमाददाते ।
तस्मात्त्दा गर्भिणी मुहुर्मुदिता भवति मुहुर्म्लाना तथा गर्भ: ।
एवं गर्भस्य जन्म व्यापत्तिमत्त्दा भवति ।

सुश्रुत शारीस्थान २६

ओजसोऽनवस्थितत्वात् ।
तथा हास्य निष्क्रमणोन्मुखस्य परिवर्तनादीन्यनुभवत एवैजसा वियोग: ।
यद्यपि च किंचितकालमस्योच्छसनं स्यात्छिन्नस्येवांगस्यौज: संस्कारानुवृत्तिकृतम् ।।
जनन्यास्तु स्थिरौजस्कतयैकदेशेन रसे संक्रान्ते ग्लानिनिरेवति ।।

सुश्रुत शारीरस्थान, २७

अन्ये पुनराहु: ।

नैऋतभागत्त्वात्तत्र गर्भस्य मरणम् ।।

अष्टांग संग्रह, शारीरस्थान, २/२६-२८

ओजोऽष्टमे अंचरति मातापुत्रौमहु: क्रमात्
तेन तौ म्लानमुदितौ तत्र जातो न जीवति ।।
शिशुरोजोऽनवस्थानान्नारी संशयिता भवेत् ।।

अष्टांग हृदय शारीरस्थान, १/६२-६३

अष्टमे गर्भिणीगर्भावाददाते परस्परम् ।
ओजो रसवहायुक्ते: पूर्णत्त्वाच्छलयत्यपि ।।
तस्मात्तत्र मुहुर्ग्लाना मुहुर्हृष्टा च गर्भिणी ।
अत्ययं चाप्नुते तस्मान्न मासो गण्यतेऽष्टम: ।

काश्यप संहिता शारीरस्थान २/९-१०

मासानुमासिक गर्भिणी पथ्यकर आहार:

प्रथम मास पथ्यकर आहार

प्रथमे मासे शंकिता चेद्गर्भमापन्ना क्षीरमनुपस्कृतं मात्रावच्छीतं काले काले पिबेत् ।
सात्म्य एव च भोजनं सायं प्रातश्च भुंग्जीत ।।

चरक शारीरस्थान ८/३२

विशेषस्तु गर्भिणी प्रथमद्वितीयतृतीयमासेषु मधुर शीत द्रवप्रायमाहारमुपसेवेत् ।

सुश्रुत शारीरस्थान १०/४

प्रथम मासे गर्भिणी क्षीरमुपसंस्कृतं मात्रावच्छीतं काले पिबेत् ।
तस्मिन्नपि चाद्यं द्वादशरात्रं क्षीरोद्भव सर्पि: शालिपर्णीपलाशाभ्यां श्रुतं
कनकरजतक्कथितशीतोदकानुपानं पिबेत् ।।
स्वादुशीतं द्रवप्रायं सात्म्यं च सायं प्रातराहारयेत् ।
न चाभ्यंगोद्वर्तनानि सेवेत ।।

अष्टांग संग्रह, शारीरस्थान ३/३

द्वितीय मास पथ्यकर आहार

द्वितीये मासे क्षीरमेव च मधुरौषधसिद्धम् ।।

चरक शारीरस्थान ८/३२

.....द्वितीय ..... मधुरशीतद्रवप्रायमाहारमुपसेवेत ।। सुश्रुत शारीरस्थान, १०/४
विशेषेण द्वितीये मधुरौषधसिद्धिं पय: पिबेत् ।।

अष्टांग संग्रह, शारीरस्थान, ३/४

तृतीय मास पथ्यकर आहार

तृतीये मासे क्षीरं मधुसर्पिर्भ्यामुपसंसृज्य।

चरक शारीरस्थान, ८/३२

..... तृतीयमासेषु मधुरशीतद्रवप्रायमाहारमुपसेवेत,
विशेषस्तु तृतीये षष्टिकौदनं पयसा भोजयेत।।

सुश्रुत शारीरस्थान, १०/४

तृतीये तदेव सर्पिर्मधुभ्याम्।

अष्टांग संग्रह, ३/५

चतुर्थ मास पथ्यकर आहार

चतुर्थे मासे क्षीरनवनीतमक्षमात्रमश्नीयात्।।

चरक शारीरस्थान, ८/३२

..... षष्टिकौदनं ..... चतुर्थे दध्ना .....।
चतुर्थे पयोनवनीतसंसृष्टमाहारयेज्जांगलमांससहितं हृद्यमन्नं भोजयेत्।।

सुश्रुत शारीरस्थान १०/४

चतुर्थेऽक्षमात्रनवनीतयुक्तम्।

अष्टांग संग्रह, शारीरस्थान ३/६

पंचम मास पथ्यकर आहार

पंचमे मासे क्षीरसर्पि:।।

चरक शारीरस्थान ८/३२

..... षष्टिकौदनं ..... पंचमे पयसा ..... जांगलमांससहितं
हृद्यमन्नं ..... पंचमे क्षीरसर्पि: संसृष्टम।।

सुश्रुत शारीरस्थान १०/४

पंचमे क्षीरसर्पि:ाष्टांग संग्रह

शारीरस्थान ३/७

षष्ठ मास पथ्यकर आहार

षष्ठे मासे क्षीरसर्पिर्मधुरौषधसिद्धम।।

चरक शारीरस्थान ८/३२

षष्ठे श्वदंष्ट्रासिद्धस्य सर्पिषो मात्रां पाययेद यवागूं वा।।

सुश्रुत शारीरस्थान १०/४

षष्ठे तदेव मधुरौषधसिद्धम्।।

अष्टांग संग्रह शारीरस्थान ३/८

सप्तम मास पथ्यकर आहार

तदेव सप्तमे मासे।

चरक शारीरस्थान ८/३२

सप्तमे सर्पि: पृथक्पर्ण्यादिसिद्धम्।
एवमाप्यायते गर्भ:।।

सुश्रुत शारीरस्थान १०/४

सप्तमे च .....।

अष्टांग संग्रह शारीरस्थान ३/९

अष्टम मास पथ्यकर आहार

अष्टमे तु मासे क्षीरयवागूं सर्पिष्मतीं काले काले पिबेत्।
तन्नेति भद्रकाप्य: पैंगल्याबाधो ह्यस्या गर्भमागच्छेदिति।।
अस्त्वत्र पैंगल्यबाध इत्याह भगवान पुनर्वसुरात्रेय।
न त्वेवैतन्न कार्यम, एवं कुर्वती
ह्यरोगाऽऽरोग्यबलवर्णस्वरसंहननसम्पदुपेतं
ज्ञातीनामपि श्रेष्ठमपत्यं जनयति।।

चरक शारीरस्थान ८/३२

अष्टमे बदरोदकेन बलातिबलाशतपुष्पापललपयोदधि
मस्तुतैललवणमदनफलमधुघृतमिश्रेणास्थापयेत्।
पुराण पुरिषशुध्यर्थमनुलोमनार्थं च वायो: तत: पयोमधुरकषायसिद्धेन
तैलेनानुवासयेत्, अनुलोमे हि वायौ सुखं प्रसूयते निरुपद्रवा च
भवति। अत ऊर्ध्वं स्निग्धाभिर्यवागूभिर्जांगलरसैश्चोपक्रमेदाप्रसवकालात्
एवमुपक्रान्ता स्निग्धा बलवती सुखमनुपद्रवा प्रसूयते।।

सुश्रुत शारीरस्थान १०/४

अष्टमे क्षीर यवागूं सर्पिष्मतीं पिबेत। नेति खण्डकाप्यो गर्भस्य पैंगल्याबाधभयात्।
अस्ति पैंगल्याबाध्स्तथाप्येवं कुर्वीत।
नीरुजं बलवर्णसत्त्वसंहननसम्पदुपेतं ज्ञातीनामग्रगण्यमपत्यं जनयतीति भगवान अत्रेय:।
बदरोदकेन पललपयोदधिमस्तुतैललवणफलघृतमधुयुक्तेनास्थापयेत्।
पुराणविड्वशुध्यर्थ मधुकादिमधुरौषसिद्धेन च तैलेनानुवासयेदनुलोमनाय वायो:। अनुलोमे
हि मारुते सुखमनुपद्रवा प्रसूते। गर्भिणीं तु न्युब्जामास्थापयेदनुवासयेद्वा। तथाऽस्या

विवृतमार्गतया सम्यगौषधमनुप्रविशति। अत ऊर्ध्वं
स्निग्धाभिर्वागूभिर्जांगलेसैश्चोपाचरेदाप्रसवकालादिति भगवान धन्वन्तरि: ।।

अष्टांग संग्रह शारीरस्थान ३/११

क्षीरपेया च पेयाऽत्र सघृताऽन्वासनं घृतम।
महुरै: साधितं शुध्यै पुराण शकृतस्तथा ।।
शुष्कमूलककोलाऽम्लकषायेण प्रशस्यते।
शताव्हाकल्कितो बस्ति: सतैलघृतसैन्धव: ।।

अष्टांग हृदय शारीरस्थान १/६४-६५

गर्भस्राव (गर्भपात):

आचतुर्थात् ततो मासात् प्रस्रवेद गर्भविच्युति:।
तत: स्थिरशरीरस्य पात:ळ पंचमषष्ठयो: ।।

सुश्रुत निदानस्थान ८/१०
माधव निदान ६४/२
भावप्रकाश चिकित्सास्थान ७०/७२
योग रत्नाकर स्त्री गर्भ रोग निदान,

गर्भस्राव निदान

ये ह्यस्य कुक्षौ वृद्धिहेतुसमाख्याता भावास्तेषां विपर्ययादुदरे विनाशमापद्यते,
अथवाऽप्यचिरजात:स्यात् ।।

चरक शारीरस्थान ४/२९

सा चेच्च्यतुष्प्रभृतिषु मासेषु
क्रोधोशोकासूयेर्ष्याभयत्रासव्यवायव्यायामसंक्षोभसंधारणविषमाशन
शयनस्थानक्षुत्पिपासातियोगात् कदाहाराद्वा पुष्पं पश्येत ।।

चरक शारीरस्थान ८/२४

ग्राम्यधर्मयानवाहनाध्वगमनप्रस्स्खलनप्रपतनप्रपीडनधावनाभिघात
विषमशयनासनोपवासवेगाभिघातातिरूक्षकटुतिक्तभोजनशोकाति
क्षारसेवनातिसारवमनविरेचनप्रेंखलनाजीर्णगर्भशातनप्रभृतिभि:
विशेषैर्बंधनान्मुच्यते गर्भ: फलमिव वृन्तबन्धनादभिघातविशेषै: ।।

सुश्रुत निदानस्थान ८/३

कृमिवाताभिघातैस्तु तदेवोपद्रुतं फलम्।

पतत्यकालेऽपि यथा तथा स्याद गर्भविमुच्यति: ।।

सुश्रुत निदानस्थान ९/९

तत्र पूर्वोक्तै: कारणै: पतिष्यति गर्भे ..... ।।

सुश्रुत शारीरस्थान १०/५७

स्त्री चेदापन्नगर्भा परिहार्याण्यासेवेत। तत्र यस्या बस्तिपार्श्वश्रोणीयोनिमुखेषु शूलं पुष्पदर्शनं वा स्यात् ।।३ ।।
यस्या: पुनरतिमात्रदोषोपचयाद्यथोक्तैर्वा व्यवायादिभिरन्यैर्वा व्याधिभि: पूर्वोपचितेन वा जनन्यपत्ययो: कर्मणा बन्धान्मुच्च्यते गर्भ: फलमिव वृन्तात ।।

अष्टांग संग्रह शारीरस्थान ४/३ व २७

गर्भिण्या: परिहार्याणां सेवया रोगतोऽथ वा। अष्टांग हृदय शारीरस्थान २/१
सामान्य लक्षण: तत्र पूर्वोक्तै: कारणै: पतिष्यति गर्भे गर्भाशयकटिवंक्षणबस्तिशूलानि रक्तदर्शनं च।

सुश्रुत शारीरस्थान १०/५७

तत्र यस्या बस्तिपार्श्वश्रीरोणियोनिमुखेषु पुष्पदर्शनं वा स्यात् ।।

अष्टांग संग्रह शारीरस्थान ४/३

पुष्पे दुष्टेऽथवा शूले .... ।

अष्टांग हृदय शारीरस्थान २/१

प्रसंस्रमान गर्भ लक्षण:

प्रसंस्रमाने सदाहपार्श्वपृष्ठशूलासृग्दरानाहमूत्रसंगा: ।

सुश्रुत शारीरस्थान १०/५७

गर्भ स्थानान्तर लक्षण:

स्थानात् स्थानं च प्रक्राम्यति गर्भे कोष्ठे संरम्भ: ।।

सुश्रुत शारीरस्थान १०/५७

असाध्य गर्भपात/स्राव:

सा चेदपचाराद द्व्योस्त्रिषु वा मासेषु पुष्पं पश्येन्नास्या गर्भ: स्थास्यतीति विद्यात्। अजातसारो हि तस्मिन काले भवति गर्भ: ।।

चरक शारीरस्थान ८/२३

अपूर्णत्रिमासास्तु पुष्पदर्शने गर्भः प्रायो न तिष्ठत्यसंजातसारत्वात्।।

अष्टांग संग्रह शारीरस्थान ४/७

असम्पूर्णत्रिमासायाः प्रत्याख्याय प्रसाधयेत।।

अष्टांग हृदय शारीरस्थान २/६

यस्याः पुनरामान्वयात् पुष्पदर्शनं स्यात्, प्रायस्तस्यास्तदगर्भोपघातकरं भवति, विरुद्धोपक्रमत्वात्त्योः।।

चरक शारीरस्थान ८/२५

आमान्वये चोर्ध्वमपि विरुद्धोपक्रमत्वात्

अष्टांग संग्रह शारीरस्थान ४/८

प्रत्याख्याय प्रसाधयेत। आमान्वये च।

अष्टांग हृदय शारीरस्थान २/७

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Table No 7
Table showing effect of Meditation Parameters + Sushrutokta Garbhini Regimen after Day1
.

Sr no	Initials	Radial Pulse	Sys. B. P.	Sleep Hrs	Sleep Qlt	Mood	Tolerance	Back Pain	Colicky Pain	Spotting	L.O.C.	Fear
1	JSB	73	120	5	Disturbed	Ok	Medium	4	2	1	0	0
2	JSD	77	130	6	Disturbed	OK	Low	3	3	2	1	1
3	BPM	78	110	6.5	Fragmented	Ok	Low	4	3	0	1	2
4	BAP	69	114	7	Fragmented	Good	High	2	1	1	2	1
5	SMK	72	128	6.5	Disturbed	Stressful	Medium	2	0	0	2	1
6	RYM	80	128	5	Restful	Ok	Medium	4	3	2	2	1
7	AGB	84	122	6.5	Fragmented	Irritable	Low	4	4	1	1	0
8	PSG	67	110	8	Sound	Good	Medium	3	2	2	0	0
9	PGW	74	132	7	Fragmented	Stressful	High	2	1	1	1	0
10	ESS	78	128	6	Fragmented	Irritable	Medium	3	1	0	2	1
11	SDB	68	118	6	Disturbed	Ok	High	4	3	1	1	0
12	RAP	70	116	5.5	Disturbed	OK	Low	2	1	2	0	0
13	SSK	82	126	7.5	Sound	Happy	Medium	2	1	2	0	1
14	NAS	70	118	6	Disturbed	Irritable	Medium	3	3	0	3	2

Table No 7
Table showing effect of Meditation Parameters + Sushrutokta Garbhini Regimen after Day1

Sr no	Initials	Radial Pulse	Sys. B. P.	Sleep Hrs	Sleep Qlt	Mood	Tolerance	Back Pain	Colicky Pain	Spotting	L.O.C.	Fear
15	MPK	75	128	6	Fragmented	Good	High	3	2	0	1	0
16	VSD	76	124	5	Restful	Ok	Medium	2	2	2	0	1
17	MPP	80	126	5.5	Restful	Stressful	Medium	3	1	1	0	0
18	PRS	78	120	6	Fragmented	Irritable	Low	4	3		0	2
19	SKB	72	114	7.5	Sound	Good	Low	4	2	0	1	0
20	MAM	78	118	6.5	Fragmented	Good	High	2	1	2	1	1
21	JYG	81	122	7	Sound	Stressful	Low	4	2	1	2	2
22	TRD	76	134	7	Fragmented	Irritable	Medium	3	1	1	1	0
23	SPR	79	120	6.5	Sound	Stressful	Low	4	3	0	0	1
24	MHP	80	100	6	Disturbed	OK	Medium	2	1	1	1	0
25	DRT	81	102	7.5	Sound	Irritable	Low	4	2	1	1	1
26	SGS	73	118	7	Fragmented	Stressful	High	2	2	2	2	0
27	ENK	68	108	6	Restful	Good	Medium	3	1	1	0	0
28	SPC	70	124	5.5	Fragmented	Good	High	3	0	0	0	1
29	SPD	73	128	6	Fragmented	Irritable	Low	4	2	1	2	2
30	PSK	69	122	7	Disturbed	Stressful	Medium	3	2	2	1	1
		2181	3490	184.5			TOTAL	89	52	30	26	20
		75.2069	120.3448	6.362069			AVERAGE		1.793103	1.034483	0.896552	1.5

Table No 8
Table showing effect of Meditation Parameters + Sushrutokta Garbhini Regimen on Day 15

	Initials	Radial Pulse	Sys. B. P.	Sleep Hrs	Sleep Qlt	Mood	Tolerance	Back Pain	Colicy Pain	Spotting	L.O.C.	Fear
1	JSB	67	100	6	Sound	Happy	High	2	1	0	1	1
2	JSD	74	126	7	Distured	OK	Low	1	2	1	2	1
3	BPM	78	118	7	Restful	Good	Medium	2	1	0	1	2
4	BAP	68	120	7.5	Sound	Good	High	1	0	0	2	2
5	SMK	70	126	7.5	Sound	Happy	High	1	1	0	1	1
6	RYM	82	122	6	Restful	Good	Medium	2	2	2	2	2
7	AGB	75	120	7.7	Fragmented	Irritable	Low	1	2	0	2	1
8	PSG	76	118	8	Sound	Good	High	2	1	1	0	0
9	PGW	80	122	8	Sound	Good	High	0	0	1	2	2
10	ESS	78	122	7.5	Fragmented	Irritable	Low	1	1	0	2	2
11	SDB	72	118	7	Sound	Happy	High	2	1	0	2	0
12	RAP	78	120	6.5	Disturbed	OK	Low	2	0	2	0	1
13	SSK	81	122	8	Sound	Good	High	2	1	1	1	2
14	MPK	76	124	8	Sound	Good	High	0	1	0	2	1
15	NAS	70	118	6.5	Restful	OK	Medium	2	2	0	2	1

Table No 8
Table showing effect of Meditation Parameters + Sushrutokta Garbhini Regimen on Day 15

	Initials	Radial Pulse	Sys. B. P.	Sleep Hrs	Sleep Qlt	Mood	Tolerance	Back Pain	Colicky Pain	Spotting	L.O.C.	Fear
16	VSD	79	120	6.5	Sound	Restful	Good	2	2	0	1	0
17	MPP	80	118	7	Restful	Restful	Happy	2	1	1	1	1
18	PRS	69	120	7	Fragmented	Irritable	Low	2	2	0	1	2
19	SKB	72	118	9	Sound	Good	High	2	2	0	1	1
20	MAM	80	120	8	Sound	Happy	High	2	0	1	2	1
21	JYG	74	120	7.5	Sound	Good	High	1	2	1	2	2
22	TRD	67	122	8	Sound	Good	High	3	0	1	2	1
23	SPR	74	120	8	Sound	Good	High	4	1	1	0	2
24	MHP	78	110	7.5	Disturbed	OK	Medium	1	1	1	2	0
25	DRT	68	108	8	Sound	Good	High	2	0	1	2	1
26	SGS	70	118	8	Sound	Good	High	2	1	1	2	1
27	ENK	78	120	7.5	Restful	Happy	Medium	3	1	1	2	0
28	SPC	76	118	8	Restful	Good	High	1	0	0	0	2
29	SPD	82	122	7	Fragmented	Irritable	Low	4	2	0	2	2
30	PSK	75	120	7.5	Sound	Good	High	3	1	0	2	2
		2177	3452	216.2				52	28	18	41	37
		75.06897	119.0345	7.455172				1.793103	0.965517	0.62069	1.413793	1.275862