

Managing Hyperacidity with Bhramari and Sheetal Pranayam: An Exploratory Study

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Abstract:

Despite advances in contemporary medicine, the management of hyperacidity, a common gastrointestinal condition, continues to pose significant challenges. Yoga has gained increased attention as a viable adjunct therapy for hyperacidity management as an alternative to traditional treatments. The purpose of this review study is to delve into the available literature on the use of yoga to treat hyperacidity symptoms and enhance overall gastrointestinal health. With the use of Sheetal and Bhramari Pranayama, the review underlines the potential benefits of yoga in lowering hyperacidity symptoms such as heartburn, acid reflux, and indigestion.

Key words: Hyperacidity, Pranayam, Stress, lifestyle, energy

Introduction:

Digestive system is the main system for a healthy life, as health depends on proper food consumption and a proper digestion. But now-a-days, western life style and food habits lead to many digestive disorders, one of them being hyperacidity. Hyperacidity is a common gastrointestinal illness that affects millions of people worldwide. It is characterized by an excess of gastric acid production, which causes unpleasant symptoms such as heartburn, acid reflux, and indigestion. [1] Despite major advances in modern medicine, hyperacidity management remains difficult due to recurrence of symptoms and severe adverse effects associated with current treatments. As a result, there is an increasing interest in investigating alternative and complementary therapy approaches that provide safe and effective hyperacidity management solutions.

Yoga has emerged as a promising alternative technique, giving a holistic and integrative method to manage hyperacidity-related symptoms and underlying physiological imbalances. Yoga is an ancient Indian science that includes a variety of techniques such as physical postures (Asanas), breathing exercises (Pranayama), meditation, and relaxation activities. Beyond its well-known mental and emotional benefits, current research has increasingly focused on yoga's potential therapeutic impact on gastrointestinal diseases such as hyperacidity.

The potential of yoga to address several components of the disease justifies its investigation as an hyperacidity management strategy. Yoga is specifically designed to address stress and lifestyle factors which frequently aggravate hyperacidity, by encouraging relaxation, reducing anxiety, and improving mind-body connection. [2]

This review will go through specific yoga practices and approaches that have shown the most promise in reducing hyperacidity-related symptoms, as well as the mechanisms of action behind them.

Common symptoms of hyperacidity:

Hyperacidity symptoms can vary in intensity and frequency, and some people may only have occasional hyperacidity, while others may have more chronic or severe symptoms. Hyperacidity is characterized by the following symptoms:

Common symptoms of hyperacidity:

- Heartburn
- Sour taste in mouth
- Bad breath
- Recurrent cough and hoarseness

- Bloating
- Nausea
- Headaches
- Vomiting

Causes of hyperacidity:

Hyperacidity occurs when stomach acid runs back up into the esophagus, often known as acid reflux or heartburn. This backward flow of acid can cause discomfort by causing a burning sensation in the chest or neck. The primary causes of hyperacidity are related to lower esophageal sphincter (LES) dysfunction and other variables that contribute to increased stomach acid production.] Here are some common causes of hyperacidity:

- Smoking
- Alcohol consumption
- Overweight and obesity
- Physical inactivity
- Eating heavy meals, junk food, and spicy food.
- Irregular meal timings
- Drinking too much tea /coffee
- Irregular lifestyle
- Stresses, anxiety and tensions are also directly linked to hyperacidity.

Frequent hyperacidity may lead to hyperacidity and stomach ulcers, and other digestive disorders like Gastro –Esophageal Reflux Disease, constipation and Irritable bowel Syndrome. [3]

Yoga therapy based on techniques of Pranayama:

The word Pranayama comprises of two words: Prana and Ayam. Prana is a Sanskrit word that denotes vital energy or life force. Ayam denotes stretching, extension, or controlling of breath. The Pranayama technique is a method for activating and regulating the life energy.

Pranayama: A Scientific view

Pranayama is a practice that helps to quiet the mind by minimizing sympathetic excitement; Also, increase in blood oxygen levels and tissue oxygen consumption are maximized, resulting in deeper relaxation and more energy.

With regular practice of Pranayama, carbon dioxide steadily rises in the system, which improves the neural system and thus overall health. The levels of noradrenalin and dopamine increases which has a good effect on both the body and the mind. Bhramari and Sheetal Pranayama, in particular, are beneficial in conditioning the autonomic nerve system, which is responsible for emotional behaviour.

Bhramari Pranayama:

Many ailments are caused by mental stress. Hyperacidity too results from this. Bhramari Pranayama is very effective at reducing stress and tension, and hence aids in the reduction of hyperacidity. Bhramari is a simple and safe practice that has a tremendous influence on the autonomic nervous system. Exhaling more slowly than inhaling has a tremendous soothing impact on the psyche. [4]

Verse (sutra) for Bhramari Pranayama (ref. HathayogaPradipika)

अथभ्रामरी"

वेगाद्घोषंपूरकंभृङ्गनादंभृङ्गीनादंरेचकंमन्दमन्दम्।

योगीन्द्राण्?अम्वमअभ्यासयोगाच्चित्तेजाताका चद्आनन्दलीला॥2.68॥ (HathayogaPradipika)

(Meaning: Breathe in quickly, making a reverberating sound like the male black bee, and exhale slowly while softly making the sound of the female black bee. By this yogic practice one becomes lord of the yogis and the mind is absorbed in bliss). [5]



Technique used for therapy:

1. Sit comfortably on the floor or mat.
2. The back should be straight and the shoulders and body should feel relaxed.
3. Close your eyes.
4. When you are ready, inhale deeply. Then for the entire length of your exhalation, make a low to medium pitched humming sound.
5. Feel the vibrations from the humming in your head region.
6. Continue the practice up to 7 rounds initially.
7. Keep your eyes closed and return to normal breathing.
8. Notice if anything has changed.
9. Gradually increase the number of rounds up to 15 -20.

- * To intensify the effect slightly, close your ears while exhaling by pressing on the tragus (the small cartilage on the cheek side) of each ear with index fingers. A more intense effect of the vibrations can be experienced by applying Shanmukhi Mudra while exhaling.
- * Shanmukhi Mudra: Place your palms on your face with one thumb on each tragus, the index fingers lightly touching the inner corners of your eyes, the middle fingers on the sides of the nose, the ring fingers above the lips, and the little fingers on lips.

Benefits of Bhramari Pranayama:

- It is the best cure for stress. It nurtures peace in your being, which in turn, results in self-healing.
- The Bhramari Pranayama lowers one's blood pressure, thus relieving hypertension.
- It releases cerebral tension, hence it is recommended in case of anxiety.
- It soothes the nerves.
- Bhramari Pranayama benefits the pineal and pituitary glands by stimulating them and thus supporting their proper functioning.
- The practice of Bhramari Pranayama helps dissipate anger.
- It prevents heart blockages.
- It helps with inducing deep sleep.

In the practice of Bhramari, the sound is produced which spreads all over the body in the form of vibrations. One can feel these vibrations in different parts of body. The continuity of these vibrations provides gentle massage to the muscles and blood vessels because of which muscle fibres get relaxed and dilated. It helps to keep blood pressure normal and reduction in stress levels. [6]

Sheetali Pranayama:

As the name suggests Sheetal means cool, and Sheetali pranayama has a cooling effect on the body and calming effect on the mind.

Verse (sutra) for Sheetali Pranayama (ref. HathayogaPradipika)

अथशीतली"

जिह्वयावायुम्आकृष्यपूर्ववत्कुम्भसाधनम्।"

शनकैर्घ्राणरन्ध्राभ्यारेचयेत्पवनंसुधीः॥२.५७॥ (HathayogaPradipika)

(Meaning: With a protruding tongue a little outside the lips, draw Prana in to the tongue. Perform Kumbhaka (breath retention). Then the practitioner should slowly release the breath through the nostrils.).



Technique used for therapy:

- Sit in a comfortable meditative posture. Close your eyes.
- Place the hands on the knees.
- Protrude the tongue from the mouth and extend it to a comfortable distance.
- Roll the sides up so that a channel is formed.
- Breathe in slowly and deeply through the tube like tongue.
- At the end of inhalation, close the mouth and breathe out through the nose.
- Practice 7 rounds initially and increase gradually upto 15 -20 rounds.

* Practice with bandha and kumbhaka(energy locks):

Practice in the same way as above but after inhalation, retain the breath inside. Practice Jalandhara bandha (throat lock) and Moola bandha (root / anal lock) for a few seconds (till comfortable).

Release Moolabandha and Jalandhara Bandha. Raise the head and breathe out through the nose.

Benefits of Sheetali Pranayama:

- Cooling effect reduces excess bile, improves the functioning of the spleen.
- It positively impacts on the nervous system and endocrine glands, releases the emotional and psychological knots present in body and mind. The cooling mechanism is very helpful for people who suffer from anxiety and hypertension and in stress management.
- Lowers hyperacidity in the intestinal area.
- Its regular practice reduces hunger pangs & quenches thirst.

Practice of Sheetali Pranayama creates a relaxed state, and parasympathetic activity overrides

sympathetic activity in this state. During inhalation the air touches to the surface of tongue, throat and produces sensation. This activates cranial nerves associated to mouth and throat region. Hypothalamus responds to the cold sensation and satiety centre gets activated, which helps to lower down the sensation of hunger and thirst. [7]

Correction in lifestyle

Many times hyperacidity is caused because of bad food choices. Although all are aware with the fact that spicy, oily food triggers the symptoms of hyperacidity, but most of them are just not able to control the desire to eat those foods. However, with the regular practice of both the Pranayamas (Bhramari and Sheetal) one can control the urge to eat wrong foods and also there is a reduction in frequency of eating such food.

Stress and anxiety are the root causes of many psychosomatic disorders. Emotional tension and psychic stress factors affect to the digestive organs and gland via the sympathetic (solar plexus) and parasympathetic (vagus) nerve pathway. [8] As stress and anxiety causes long lasting muscle tension, it affects the muscles around stomach with pressure, which pushes the acid upwards. Also high level of stress increases the production of stomach acids. In Pranayama, the breathing is regulated and controlled which has an immense calming effect on the mind. It helps to regularize smooth sleeping pattern, normalizes heart rate, blood pressure and hormonal levels because of the parasympathetic dominance. [9] According to the recent study, the increase of parasympathetic activity (associated with expiration time) reduces the release of hormones associated with stress, and enhances GABA inhibition from the prefrontal cortex and insula to the amygdala, reducing its activity, and the psychological and somatic symptoms associated with stress. [10] Positive mind has direct impact on smooth functioning of the body and it helps to maintain a state of harmony, overall health and wellbeing in the systems.

Conclusion:

In conclusion, this review paper highlights the potential relevance of Bhramari and Sheetal Pranayama as an effective method for reducing hyperacidity-related symptoms and improving gastrointestinal well-being. By including these techniques of Pranayama in an integrative approach to hyperacidity control, healthcare practitioners may be able to provide patients more comprehensive and tailored treatment options, thereby enhancing their overall quality of life. However, more research is needed to determine the precise mechanisms of yoga's hyperacidity-reducing benefits and to improve the implementation of yoga protocols in clinical practice.

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