Effect of Yogic management on Gastroesophageal Reflux Disease{GERD}

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Abstract:-

Yoga is an ancient Indian Science of living which was developed by the sages to help manifest humanpotential to its maximum. It gives a complete holistic physical, mental, emotional, social andspiritual development to an individual. Thus, it can be practised by all irrespective of thelevel they are in. Yoga can help create a healthy mind bodyconnection, improving their co-ordination, behaviour, moods, physical activity and socialabilities.¹

Yoga methods including Pranayama are the best ways to prevent many diseases and their progression.

There are many methods including pranayama which show effects on many chronic diseases where gastroesophageal reflux disease is one of them.²

This is most effective on psychosomatic aliments. It cannot only prevent and cure diseases but also promotes positive health.

What is Gastroesophageal Reflux Disease?

GERD is a state in which acid moves to the oesophagus and annoy its sensitive lining.it has many complicated symptoms like burning sensation in stomach, chest, and throat to coughing, hoarseness, sensation of heat in your ears, palms and feet. Most common cause of GERD are obesity, taking meals at irregular intervals, consuming junk, spicy, and fatty food, alcohol and cigarettes, excessive tea and coffee, among other things. Stress and an unhealthy lifestyle are also key contributing factors. If we left the GERD untreated, can lead to more serious health disorders such as ulcer and cancer.³

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Root of GERD -

The most common reason of acid reflux and GERD is a faulty lower oesophageal sphincter. Other reason included:

Diet: -consumption of large amount of food and caffeine sources increase the chances of GERD and food like citrus, fat, or spices induce acid reflux.

Acid Content: - An increment amount of acid in the stomach can cause GERD.

Lifestyle:-consumption of Alcohol and smoking, wearing tight clothes cause acid reflux.

Obesity: - The excessive fat in obese individuals can put pressure on the stomach and may dislocate the LES. It can also put pressure on the valve, forcing it open and causing acid reflux.⁵⁻⁷

Sign of GERD -

Common signs of GERD include -

- A burning sensation in your chest (heartburn), usually after eating, which might be worse at night
- Chest pain
- heavy swallowing
- Regurgitation of food or sour liquid
- Sensation of a lump in your throat

If you faced acid reflux in night time, you may experience: -

- Chronic cough
- Laryngitis
- New or worsening asthma
- interrupt sleep⁸

Yoga for GERD: -

Yoga is one of the most efficient and natural cures for acidity. It is also one of the easiest and quickest ways to not only overcome the effects of acid reflux but also helps strengthen your digestive system. Yoga poses to cure acidity and gas are simple and can be practiced daily at home. These are some specific practices for upper digestive disorders :-

Asanas: -

Utthanpadasana, Trikonasana, Paschimottanasana, Vajrasana, Bhujangasana, Ardhamatseyendrasana, Ustrasana, SuryaNamskara.

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Pranayama: -

Nadishodhana, Bhramari

Kriyas: -

Kapalabhati, Agnisara, Vamana Dhauti, laghushankhaprakshalana

Relaxation: -

Yoga Nidra

Possible mechanism:-

Targeting sphincter: - LES and crural diaphragm are two internal and external sphincters respectively works as antireflux barriers.^[14] The untoned sphincter may be toned up through yoga as it works upon the skeleton as well as smooth muscles. Yogic breathing exercises like *kapalbhati* and *nadishodhan* along with *agnisara kriya* allow the maximum use of phrenic muscle^[15] and tones it up which may help in reducing the backflow of the stomach content to the esophagus. A case report by Dharmesh et al. ^[16] reported a decrease in the severity of GERD after 6 months of practice of *kapalabhati* and *agnisara kriya* by a 62 years old person.

Targeting hyperacidity: - Hyperacidity may be predominant contributing factor to GERD which is known as a *pitta* aggravated *dosha* in *Ayurveda* and is treated by *Virechana*. The Yogic technique of *Laghushankhaprakshalana*resembles to the *Virechana karma* as both are aimed to clean the entire digestive tract. ^[17] Frequent administration of *vamanadhauti* may also help to relieve from the symptom as it washes out the stomach. The water helps to expel the acid, undigested and fermented food out and salt inhibits the gastric acid secretion. ^[18]

Targeting obesity and muscles tone: - The mass and strength of skeletonmuscles are decreased in sarcopenia which is reported as an independent predictor of GERD whereas sarcopenic obesity is associated with Erosive reflux disease (ERD), a subcategory of GERD. ^[19] The muscles tone can be achieved back by certain asanas which are mainly focused to the abdominal region like uttanapadasana, trikonasana, pashchimottanasana, vajrasana, bhujangasana, ardha-matsyendrasana, ushtrasana and suryanamaskara. These asanas strengthen the abdominal muscles, reduce the waistline fat and massage the internal organs. ^[18]

Targeting stress: -

Long term stress may be a factor associated with the onset of the problem but it is not clear yet. However, studies suggest that stress may exacerbate the symptoms in the patients with

GERD. ^[20] In a systematic review ^[21]*bhramari pranayama* is found to be effective in combating stress. *Yoga nidra* is also a *pratyahara* technique which is helpful to decrease the level of stress as reported by the Ruchika et. Al. ^[22]

Yogic principles of healthy living: -

"Health is wealth" is a known fact. To achieve a healthy lifestyle we have to follow healthy entails.Now a days biggest issue is a bad lifestyle that requires changes to attain a healthy lifestyle.Yoga improves lifestyle and it shows a great effect on a proper and healthy lifestyle.Ther are some components:-

Achara –Achara means our lifestyle firstly for being a good mental health we have to comes from a right achara.yoga releases the stress.yoga included asanas,pranayama,mudra and bandh on a regular basis.Cardio disease is one of the main disease which is caused by our lifestyle.

Vichara –Vichar means our thoughts for a better intellectual health we have to think positive for our right vichar (thoughts). Positive thoughts and positive attitude towards life is a medicine for well-being. A balanced state of mind is obtained by following the moral restraints and ethical Observances (Yama -Niyama).

Ahara – "Annam Brahma" – Food is Brahma. Yoga emphasizes need for a healthy, nourishing diet that has no adequate intake of fresh water along with intake of fresh balanced food. It is important to be aware of the need of satwik food [Green salads, sprouts, fruits, unrefined cereals etc..] prepared and served with love and affection. Yoga recommends mitahara that if stomach is divided into 4 parts 2 parts should be filled with food, 1 part with water and the remaining one part should be left empty.

Vihara – "better emotional health through vihara" – one shouldnot go to polluted areas over straining is not good for health, not stick on to one's own rules, mixing with

Conclusions: -

Yoga may not give immediate and instant results as allergenic medicines gives, but précised regularly over a period of time it can cure and prevent many diseases. This is most effective on psychosomatic aliments. It cannot only prevent and cure diseases but also promotes positive health. Yoga has wide scope, it improves health of all alike (young, old, district, diseased or week) and wards of diseases provided properly abide by the rules and regulations.

Thus yoga acts as a tool for preventing diseases and promoting & restoring health.

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