



ROLE OF YOGA IN ALLERGIC RHINITIS

Surya Kant

Professor & Head, Department of Respiratory Medicine, King George's Medical University, UP, Lucknow

Shruti Agnihotri*

Women Scientist (DHR), Department of Respiratory Medicine, King George's Medical University, UP, Lucknow*Corresponding Author

ABSTRACT Allergic rhinitis is associated with a group of symptoms affecting the respiratory system on large scale. A person can be allergic to dust, animal dander, mold, pollen or any food item. An allergen can be something that triggers an allergy. This allergy causes allergic rhinitis. According to WHO, the global burden of AR is estimated at 400 million people and people spent a large some amount on Allergic Rhinitis. A lot of studies have been done on asthma but not on allergic rhinitis. The current article will provide the complete information of Allergic Rhinitis and an adjuvant therapy to treat the disease without spending too much burden.

KEYWORDS : Adjuvant; asthma; rhinitis; burden; triggers

INTRODUCTION

Lung diseases constitute a major public health problem worldwide: according to the World Health Organization (WHO), approximately 400 million people worldwide suffer from asthma and approximately 250,000 people die from asthma each year.^[1- 2] Moreover, approximately 12–30% of the population across all regions suffers from allergic rhinitis (AR). Although AR is not a fatal disease, it is associated with high quality of life, loss, and costs. Asthma is a chronic respiratory disease characterized by obstructive airways disease, allergic inflammation, and airway reactivity.^[3] Asthma continues to increase worldwide, and has been the case for the past two decades. Asthma is a chronic inflammatory disease. It occurs most commonly in children, adolescents, and adults. This is an inflammation of the airways in the lungs, characterized by runny nose, rhinorrhea, sneezing, nasal itching, and postnasal drip. AR is closely related to asthma, and 10–40% of rhinitis patients also have asthma.^[4-5]

BURDEN OF ALLERGIC RHINITIS- According to WHO (2023), the global burden of AR is estimated at 400 million people.^[6] People with AR often experience symptoms after inhaling allergens such as pollen or dust. Ragweed is a common allergy in the fall. In spring, grass and pollen are the main culprits. AR is one of the most common chronic diseases, with a prevalence ranging from 3% to 19% depending on the country.^[7]

CLASSIFICATION- AR is a heterogeneous disease, with seasonal manifestations of AR being classified as seasonal (occurring at a specific time of year) or annual (over several years).^[8] However, not all patients fit this classification scheme. For example, some allergens, such as pollen, may be seasonal in cold weather but persistent in warm weather and patients with multiple "seasonal" allergies may have symptoms for most of the year. Therefore, AR is currently classified according to the duration of symptoms (free or persistent) and severity (mild, mild, or severe).^[9] Asthma is classified into external and internal asthma, and the severity of asthma is also classified. Symptoms are classified as intermittent or continuous (mild, moderate, severe) depending on the frequency of symptoms, forced expiratory volume in 1 second (FEV1), and peak expiratory flow (PEF).^[10]

TREATMENT- The goal of AR therapy is to relieve symptoms. Treatment options available to achieve this goal include preventive measures, oral medications, corticosteroids (INS), leukotriene receptor antagonists, and chemotherapy sickness. AR and asthma are symptoms of combined asthma, so treatment of asthma is an important issue in people with AR.^[11-12]

The first-line treatment of AR is to avoid relevant allergens (eg, house dust mites, molds, pets, pollen) and triggers (eg, smoke tobacco).^[13] Asthma is a chronic condition that cannot be cured, but medication and lifestyle changes can help with symptoms. One way to get rid of asthma is to avoid things in the environment that make symptoms worse. A variety of medications are used to treat asthma. AR and asthma are chronically heterogeneous diseases, the epidemiology, health and social costs overlap with quality of life. Both inflammatory diseases share similar pathophysiology.^[14-16]

YOGA AS AN ADJUVANT TREATMENT- However, each disease has a set of treatments that are used separately to manage those diseases, and yoga can be used as an adjunctive treatment for both diseases. AR is a global health problem affecting patients of all ages and ethnicities, and approximately 30% of the general population.

Yoga originated in ancient India and is an important part of India's diverse culture. Yoga includes common elements such as breathing (pranayama), postures (asana) and meditation (dhyana).^[17] Yoga is a non-drug adjunct to conventional asthma treatment. Yoga is a form of complementary and alternative medicine.^[18] The word "yoga" comes from the Sanskrit root "yuj" which means to unite or to yoke, to connect, to guide and focus.^[19-20] Regular yoga practices provide strength, endurance, flexibility and manage the qualities of friendship, love and greater self-control while promoting peace and life.^[21-22] Practicing yoga creates a state of mind that is the opposite of the fight-and-flight stress response, and by inhibiting the stress response, it achieves a sense of balance between mind and body. Yoga is known for its beneficial effects on physical and mental functions and improving the quality of life of patients.

NASAL DOUCHING TECHNIQUE (JALNETI)- Jalaneti is a yoga practice that helps the nostrils clear of congestion and mucus production. To do the first steps, mix a tablespoon of pure (ionized) salt with half a litre of water in neti pot. Carefully insert the spout of the pot in one of the nostril and give a slight sideways tilt to the head. Water enters from one nostril and exits through the other nostril. Don't breathe, laugh, or talk while doing it. Repeat the process from the other nostril. In this basic Jalanti tradition, water poured into one nostril comes out of the other, but sometimes water comes out of the mouth. For this reason, it is important to keep the mouth open. After Jalanti it is very important to dry the nose. The purpose of this operation is to eliminate the direct airway from the nostrils to the throat. If the goal is achieved through water, the method is called jalaneti.

A number of studies done on asthma patients but not allergic rhinitis patients. A study was done on eighty patients of AR concluded that nasal breathing exercise is a simple and cost-effective measure to reduce symptoms of AR and improve patient satisfaction.^[23] A randomized controlled study on 241 patients of mild to moderate persistent chronic bronchial asthma patients concluded significant improvement in biochemical profile of asthmatics in the yoga group.^[24] They also reported that asthma symptom scores decreased significantly after the practice of asanas, pranayama, and meditation for the period of 6-month practice in the yoga group in comparison to controls.^[25]

Pranayama Nadishodhan and Kapalbhati showed a significant result on forced ventilation capacity, maximum voluntary ventilation, and PEFR.^[26] A study also concluded that yoga practice can be advocated for improvement of respiratory efficacy as well as an alternative therapy or as adjunct to conventional therapy in respiratory diseases.^[27] A randomized controlled study of sixty patients showed that lung functions improved significantly in the patients of the yoga group after 2 months of the yoga practice from the baseline. Pranayama and yoga

breathing are used to increase respiratory stamina, relax the chest muscles, expand the lungs, raise energy levels, and calm the body.^[28] In a study, the effect of yoga on asthmatic patients concluded that most of the individuals in the yoga group showed a decreased number of day attacks per week and night attacks per month as compared to the control group. They also concluded a significant improvement in PEFr. Yoga group showed 66.7% reduction in the use of salbutamol puff and 58.3% in the use of salbutamol tablets while control group showed only a reduction of 16.6% in the use of puff.^[29] A study reported the significant change in FEV1 and PEFr in the yoga group after the regular practice of yoga for 8 weeks of the study period from the baseline; the frequency of rescue medication use significantly decreased over the study period in yoga group and control groups. However, the reduction achieved earlier was greater in the yoga group than in the control group. This study supported the effectiveness of yoga in the treatment of bronchial asthma.^[30]

CONCLUSION- Yoga is one of the complementary medicines which put a great impact on human body. There are more evidences in favor of yoga practices but it should be remember that yoga alone cannot be used as a treatment modality. It is an alternative and complementary method to improve asthma. Yoga is an effective tool in the management of asthma and more scientific studies are required in this area to utilize the maximum benefit from this ancient magical science.

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CONFLICTS OF INTEREST-No

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