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Yoga As a Complementary Therapy in Asthma

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ABSTRACT

One technique that can assist improve muscular efficiency, aerobic capacity, and endurance time is yoga. It can also lessen the feeling of exertion following exercise. Many people utilize yoga as a way to decompress. Yoga is one method that can help increase aerobic capacity, muscular efficiency, and endurance time. It can help minimize the post-exercise feeling of exertion. Yoga is a popular method of relaxation. Additionally, yoga significantly affects the autonomic nervous system (ANS). Numerous studies examine the benefits of yoga practice for asthma management. Incorporating a comprehensive program, such as yoga, which promotes meditation, asana (posture), and pranayama (breathing), has been associated with improved breath.

Keywords: asthma; autonomic nervous system; meditation; pranayama

INTRODUCTION

Yoga has its roots in ancient India and is still a significant part of the country's rich cultural diversity. Common elements of yoga include postures (asanas), meditation (dhyana), and breathing techniques (pranayama). [1] Yoga is a holistic therapy, thus it doesn't include any postures or breathing techniques that are specific to asthma. [2,3] Uncertainty surrounds the precise mechanism by which yoga may alleviate asthma symptoms. Nonetheless, a number of theories have been put forth. The breathing technique used in yoga is the subject of the first explanation. Frictional stress in the airways can cause damage to the airway wall, alter the smooth muscle dynamics in the airways, and cause mast cell degranulation, all of which can be triggers for asthma attacks.[4,5,6] Yoga also has a significant impact on the autonomic nerve system (ANS). Numerous research look at the advantages of yoga practice in managing asthma. Incorporating a holistic program, like yoga, which aids in meditation, asana (posture), and pranayama (breathing), has been linked to fewer weekly asthma attacks, better breathing, and greater medication response.[7]

MEANING OF YOGA

The National Institutes of Health classifies yoga, a 3,000-year-old tradition, as complementary and alternative medicine and views it as a comprehensive approach to health in the West. [8] The Sanskrit root "yuj" (union, or yoke) for "yoga" implies to unite, to focus, and to direct one's attention. [9] In addition to fostering qualities of kindness, compassion, and increased self-control, regular yoga practice also builds strength, endurance, and flexibility while fostering a sense of peace and wellbeing.

SCIENTIFIC STUDIES RELEVENT TO ASTHMA

A case-controlled study involving 53 patients with asthma examined the effects of a comprehensive program consisting of asana, pranayama, and meditation over a period of two weeks.[10] The results indicated that those in the yoga group experienced fewer asthma attacks each week, enhanced breathing capabilities, and a better response to their medications. In another study with 570 asthma sufferers, participants who practiced yoga demonstrated a notable improvement in peak expiratory flow rate (PEFR) following consistent engagement in yogic exercises. This research highlighted the long-term effectiveness of a holistic approach to yoga therapy, with patients being monitored for a duration ranging from 3 to 54 months.[11]

A total of 22 participants with mild asthma were involved in a randomized, double-blind, placebo-controlled crossover study. During two-week intervals, the patients inhaled through a pink city lung exerciser or a corresponding placebo device. There was a notable enhancement in airway reactivity. [16] A randomized controlled study has demonstrated that the practice of Sahaja Yoga offers some limited benefits for asthma. Sahaja Yoga is a traditional meditation practice rooted in Yogic principles that may serve therapeutic purposes.[12]

The application of Yogic techniques, including Pranayama, in patients with asthma demonstrated a notable level of relaxation, a more positive outlook on asthma, and increased exercise capacity. [13] The research also indicated a trend towards reduced reliance on beta-adrenergic inhalers. In a randomized controlled trial, significant enhancements were observed in pulmonary functions and AQLQ scores in both participant groups, with the Yoga group showing greater improvement. [14]

Another research concluded that yoga practice could be recommended for better respiratory efficacy and can serve as either alternative therapy or a complement to traditional treatments in respiratory conditions.[15] A randomized controlled trial involving 60 participants found that lung function showed notable improvement in the yoga group after two months of yoga practice compared to their baseline measurements. [16]

Pranayama and yoga breathing techniques are employed to enhance respiratory endurance, relax the muscles in the chest, expand the lungs, boost energy levels, and promote relaxation in the body. In another randomized controlled study with 241 individuals suffering from mild to moderate persistent chronic bronchial asthma (121 in the yoga group and 120 in the control group), significant enhancements were observed in the biochemical profiles of the asthmatic patients in the yoga group, with an increase in superoxide dismutase activity noted compared to the control group.[17]

The research indicated that the group practicing yoga showed a notable enhancement in spirometric measures. A decrease of about 55% in the use of rescue inhalers was observed in the yoga group compared to the control group. [18] Additionally, the study found that the quality of life for participants in the yoga group also saw improvement. Significant upgrades were noted in all subdomains of the Asthma Quality of Life Questionnaire (AQLQ) at both the 3rd and 6th months when compared to the control cohort. [19,2,21] One randomized controlled trial involving asthma patients revealed that the yoga group exhibited a marked increase in Superoxide dismutase, Glutathione, and Catalase levels compared to those in the control group.[22]

CONCLUSION

There are so many studies carrying out on different diseases in which yoga has great impact. Yoga is not an alternative and complementary method, its therapeutic aspect boosts the power of patient while defeating asthma, if it is used as an adjunct therapy with standard medical therapy.

CONFLICT OF INTEREST

(If present, give more details): None

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