The efficacy of two-year yogic practice on selected pulmonary function test in postmenopausal women

Ramesh Bhat, Pratik Kumar Chatterjee, Suman Veerappa Budihal, Nayanatara Arun Kumar, Kunal, Vinodini Nithyananda Madom Anantharaya

Department of Physiology, Kasturba Medical College, Mangalore, Manipal Academy of Higher Education, Manipal, Karnataka, India.

(Received: April 2019  Revised: May 2019  Accepted: June 2019)

Corresponding author: Nayanatara Arun Kumar. Email: nayanatara.arun@manipal.edu

ABSTRACT

Introduction and Aim: Menopausal transition has been well associated with a series of hormonal changes that has been linked to impairment of respiratory function. The present study was designed to evaluate the cumulative effect of practicing yoga on certain respiratory parameters in postmenopausal women.

Materials and Methods: Sixty postmenopausal women were divided into two groups (n=30 each). Based on the duration of yoga, they were grouped into Group I – (Regularly doing yoga for one year) and Group II (Regularly doing yoga for the two years). The women not doing any yogic exercises were taken as the control group; Group Ia (for One year) and Group II a (for two years). The respiratory parameters were measured with the help of vitalograph.

Results: All the observed respiratory parameters such as vital capacity (VC), Forced vital capacity (FVC), FEV1 (Forced expiratory volume during the 1st second.), FEV1 ratio, PEFR (Peak expiratory flow rate). FEF50 (Forced Expiratory Flow at 50%), showed a significant (P<0.0001) improvement in Group II when compared to the Group I.

Conclusion: Yoga practice can be advocated to improve pulmonary function tests in post-menopausal women which might help in preventing respiratory diseases during aging process. Optimum benefit of yoga was observed during the two years of yoga practice in the postmenopausal women. Continued practice of yoga might be also considered as a preventive exercise to impair age related morbidity and improve the quality of life.

Keywords: Post- menopausal; yoga; pranayama; pulmonary function test.