

CHAPTER 35

MEDICAL SCIENCES MEDICAL PHARMACOLOGY

Doctoral Theses

01. THOKCHOM(Suresh Kumar)

Clinical Study to Evaluate the Effects of Yogic Intervention on Pulmonary Functions, Inflammatory Markers, Oxidative Stress and Health Status in Patients of Chronic Obstructive Pulmonary Disease (COPD).

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Abstract (Not Verified)

The study was a prospective, randomized, parallel, clinical research conducted in patients of COPD as per ICH-GCP guidelines after approval by the Institutional Ethical Committee of VPCI. The patients with clinical diagnosis of COPD were recruited as per the inclusion/exclusion criteria and randomized into two groups - Group I which was on conventional pharmacotherapy (Budesonide + Formoterol) for 3 months and Group II which was given additional yogic intervention for 50 minutes daily. The patients were physically examined and baseline parameters of PFT, BODE index, Quality of life, markers of inflammation (NLR, OPG, TNF- α , FeNO) and oxidative stress (8-isoprostane, SOD) were assessed and followed up at 1, 2 and 3 months. The comparison of parameters was done between Group I and Group II after respective treatments. Both the groups showed effective and consistent improvement in BODE index and Quality of life, however the magnitude of improvement was significantly more in Group II thus indicating better improvement from the risk of death. Further, PFT values, CC16, SOD levels were significantly improved whereas NLR, OPG, TNF- α , FeNO and 8-isoprostane were reduced in both the groups, but the modulations were remarkably more in Group II thus indicating anti-inflammatory and anti-oxidative effects of yoga in COPD patients. This was corroborated by significant improvement in quality of life in Group II patients as assessed by St. George's Respiratory Questionnaire for COPD patients (SGRQ-C), which may possibly be mediated by modulation of cellular and molecular markers of inflammation and immunity and restoration of pro-oxidant antioxidant balance. Thus, yoga therapy may be included as an acceptable, potential and non-pharmacological adjunct to conventional pharmacotherapy for better management of COPD.

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