

Title: Yogic intervention improves symptoms of fibromyalgia? An objective study

Background & Objectives - Fibromyalgia is a chronic and widespread musculoskeletal pain syndrome; patients besides excruciating pain, also manifest fatigue, morning stiffness, sleep problems and brain fogging. Although there are some FDA approved drugs available for temporary symptomatic relief; but there is no permanent cure till date. We aimed to study the effect of yogic intervention on pain status, quality of life, musculoskeletal and cortical parameters in fibromyalgia patients.

Methods - We have recruited 117 fibromyalgia patients in the randomized controlled trial with two arms – Yoga group and Waitlisted group. We assessed pain using both subjective and objective parameters. Quality of life (QoL) was assessed using WHO-QoL questionnaire. Musculoskeletal activity was assessed using sit and reach box, lateral goniometry and Schober's test. Cortical parameters were recorded using Transcranial Magnetic Stimulation machine at left motor cortex.

Results - We have found a reduction in the pain both using descriptors and pain rating scales. Objective assessment of pain also showed higher threshold in the experimental group; fibromyalgia patients at shoulder area and lower back. Quality of life and sleep of the patients randomized in the yoga group also showed significant improvement. Musculoskeletal activity of the patients practicing yoga has also been improved after four weeks. Waitlisted controls didn't show any significant change. Corticomotor parameters showed significant change from the baseline after yogic intervention. We have not found any significant change in silent periods in both any of the arm post-intervention.

Conclusion – Yogic Intervention in lifestyle practice can provide pain relief, improve quality of life, enhance musculoskeletal activity and also improves cortical excitability of fibromyalgia patients.