

INFLUENCE OF YOGIC PRACTICES ON PATIENTS WITH ANKYLOSING SPONDYLITIS

Arumay Jana

Ph.D. scholar

Department of Physical Education, Jadavpur University

Dr. Asish Paul (Supervisor)

H.O.D. & Associate Professor

Department of Physical Education, Jadavpur University

Dr. Pradyot Sinhamahapatra (Co-supervisor)

Associate Professor

Department of Clinical Immunology and Rheumatology,
Institute of Postgraduate Medical Education & Research, Kolkata (SSKM)

Abstract

Background: Ankylosing spondylitis (AS) is a chronic, inflammatory disease affecting the axial skeleton, causing stiffness and spine restriction. Yoga, an ancient Indian discipline, is considered a complementary therapy, but its effectiveness in AS is limited in literature, prompting further evaluation of its role.

Objectives: The study aims to investigate the influence of yoga on disease activity, functional limitations, inflammatory markers, blood count, general health, psychological, and HRQoL variables in AS patients.

Methods: Total 50 male subjects aged 18-40 years with Ankylosing Spondylitis from IPGMER, Kolkata, randomized into yoga and control groups. The yoga group practiced yoga techniques for 24 weeks for 1 hour, 5 days/week, monitored via virtual mode and monthly physical interaction, while the control group followed conventional treatments.

Results: Data were analyzed by non-parametric statistics. Between groups analysis showed significant differences ($p < 0.05$) in BASDAI, BASFI, inflammatory markers,

psychological variables, and HRQoL variables in the post 12 and 24 weeks interventions, but no significant differences were found in blood count profile, serum cortisol, blood pressure, and BMI. Within group comparison, significant differences were found between the pre-test and post-12 weeks in BASDAI, BASFI ESR, CRP and TNF-alpha, blood pressure, BMI, psychological variables and HRQoL Variables in the yoga group. Post 12 weeks and post-24 weeks in the yoga group significance difference were found in BASDAI, BASFI, psychological and five domains of HRQoL variables. In control group also significant difference found in BASDAI and BASFI at 12 weeks and BASFI at 24 weeks. Significant changes were observed in BASDAI, BASFI, ESR, CRP, TNF alpha, BMI, psychological variables, and HRQoL between yoga and control groups at pre-test and post-12 weeks.

Conclusions: Yoga practices have shown to improve disease activity, functional ability, physiological and psychological parameters and domains of health related quality of life (HRQoL) in patients with ankylosing spondylitis. Thus, yoga practices with virtual monitoring and monthly physical interaction can be considered as an effective complementary approach for the treatment of AS patients.

Keywords: Yoga, Ankylosing Spondylitis, Disease activity, Inflammation, Quality of life