

Efficacy of balneotherapy, peloidotherapy and group exercises in the management of Ankylosing Spondylitis

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The objective of this study is to determine the efficacy of balneological treatment consisting of hydrotherapy and peloidotherapy and group exercise therapy in the management of ankylosing spondylitis (AS).

40 AS patients from the Department of Medical Ecology and Hydroclimatology Istanbul Faculty of Medicine were randomized into two groups. In group 1 patients prescribed 15 sessions of hot water pool hydrotherapy and peloidotherapy with local mud pack application for 3 weeks duration at the Balneological Treatment Outpatient Unit of the Department. At the last session, they had given home based exercise program instructions and brochure for ankylosing spondylitis. In Group 2 patients attended 15 sessions of group exercise therapy supervised by a physiotherapist at Cerrahpaşa Medical Faculty, Physical Medicine and Rehabilitation Exercise Unit, for 3 weeks duration. At the last session, they had given the same home-based exercise program and brochure for ankylosing spondylitis.

The patients were examined before therapy, after completing the all treatment sessions and 3th and 6th months afterwards. Outcome measures were pain intensity (visual analog scale, VAS), patient's general evaluation (VAS), physician's general evaluation (VAS), Health Assessment Questionnaire (HAQ), Bath Ankylosing Spondylitis Functional Index (BASFI), Bath Ankylosing Spondylitis Disease Activity Index (BASDAI), Bath Ankylosing Spondylitis Metrology Index (BASMI), Lumbar Schober index (cm), finger-floor distance (cm), occiput-wall distance (cm) and chest expansion (cm).

Statistically significant improvement on pain-VAS scores was seen in Group 1, in all assessments. In Group 2, statistically significant decrease in pain-VAS was only seen after the therapy. But decrease in pain at 3rd and 4th measurement weren't significant. In group comparisons, metrological indexes were found statistically significant in exercise group patients except chest expansion outcomes which were seen significant in both groups, in all short-term and long-term assessments. Besides improving pain ambulatory balneological treatment and exercise therapy seem

to improve inspiratory function and mobility in AS patients. This type of treatment may be added in the overall treatment program as an effective nonpharmacological modality considering the beneficial effects on respiratory system and spine mobility as well as on pain and function in AS patients.

Key Words: Balneological treatment, Peloidotherapy, Ankylosing Spondylitis, Exercise therapy