The effect of balneotherapy on patients with ankylosing spondylitis.

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Objective: To compare the effect of balneotherapy on physical activity and quality of life as well as the symptoms of pain and stiffness with exercise alone in ankylosing spondylitis (AS) patients.

Methods: A total of 60 patients who had a diagnosis of AS according to the modified New York criteria were included in the study. The patients were randomly assigned to two groups. In Group I (n = 30) the patients received balneotherapy in a therapeutic pool for 30 min once a day for 3 weeks. All patients received instructions on the exercise programme, which they were requested to repeat once a day for 30 min during the study. The patients in this group continued the same exercise programme after the end of the balneotherapy protocol to complete a course of 6 months. In Group II the patients were given the same exercise protocol but did not receive balneotherapy. Patients were evaluated before the start of the study and at 3 weeks and 24 weeks. Evaluation parameters were daily and night pain, morning stiffness, the patient's global evaluation and the physician's global evaluation (according to a scoring system of 1 to 5), the Bath Ankylosing Spondilitis Disease Activity Index (BASDAI), Bath Ankylosing Spondylitis Functional Index (BASFI), Dougados Functional Index (DFI), tragus-wall distance, chest expansion, modified Shober test (MST), fingertip-fibula head distance, and Nottingham Health Profile (NHP).

Results: Evaluations were completed in 54 patients in the two groups. Comparison of the groups showed significantly superior results for Group I for parameters of BASDAI, NHP total, pain, physical activity, tiredness and sleep score, patient's global evaluation and the physician's global evaluation at 3 weeks, but only for the parameters of patient's global evaluation and MST at 24 weeks.

Conclusion: Balneotherapy has a supplementary effect on improvement in disease activity and functional parameters in AS patients immediately after the treatment period. However, in the light of our medium-term evaluation results, we suggest that further research is needed to assess the role of balneotherapy applied for longer durations in AS patients.

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