

The effectiveness comparison of same balneotherapy applications with different frequency within different time periods in patients with fibromyalgia; a randomized controlled single blind study

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Aim: To observe the short and middle term effects of intermittent and consecutive (traditional) regimens of same balneotherapy applications in patients with fibromyalgia syndrome.

Material and Method: Fifty female patients who were diagnosed as fibromyalgia syndrome according to the American College of Rheumatology 2010 criteria were randomly assigned to either consecutive (group 1) or intermittent treatment (group 2) groups. After randomization 5 patients from each group dropped out from the study with different excuses. Both groups received 20 minutes of full body immersion in tap water (at 38°C) and 30 minutes of mud pack treatment (at 45°C) on back region. Treatments in group1 (n=25) were delivered 5 weekdays for 2 consecutive weeks, and for group 2 (n=25) 2 times weekly for 5 consecutive weeks (totally 10 sessions for both groups) in Hydroclimatology Therapy Unit. All patients continued to use their usual medical treatment. An investigator who was blinded to the interventions assessed all the patients before and after the treatment, at the first and the third month of follow-up. Outcome measures were pain, patient's and physician's global assessments on VAS, tender point count, Fibromyalgia Impact Questionnaire (FIQ), Beck Depression Index (BDI) and the Health Assessment Questionnaire (HAQ).

Results: There was a statistically significant improvement in both groups in terms of pain (VAS) and tender point count at the end of the treatment that lasted up to the 3rd month. Results were found to be the same for physician's global assessments (VAS) except for after treatment evaluation. While there was a significant improvement in patient's global assessment (VAS) and BDI at the 3rd month follow-up for group 1, group 2 was observed to have significant improvements during

all the assessments for patient's global assessment (VAS) and at 1st and 3rd month controls for FIQ. In between-group comparisons, group 2 was found to be superior for fatigue (at 1st month) and pain subscales (at 3rd month) of FIQ.

Conclusion: The consecutive or intermittent delivery of ambulatory balneotherapy programs, consisting of full body immersion in heated tap water and mud pack treatment on back region, both are effective in the treatment of fibromyalgia. For some parameters evaluating pain and fatigue intermittent treatment seems to be superior.

Key words: Fibromyalgia Syndrome, Balneotherapy, Hydrotherapy, Peloidotherapy, Intermittent treatment.