11-1 Mud therapy in rheumatic diseases

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Objectives: Mud Therapy or peloidotherapy is implemented to treat various diseases; rheumatic gynecological, dermatologic, gastrointestinal disorders etc. It is mostly used for treating rheumatic diseases in Turkey. We summarize the results of our studies that aimed to investigate the effects of mud therapy in rheumatic conditions.

Materials and Methods: In last five years (2008-2013) we conducted 6 study to investigate the beneficial effect of mud therapy in rheumatic diseases. These rheumatic conditions are knee osteoarthritis (two studies) ankylosing spondylitis, rheumatoid arthritis, hand osteoarthritis and fibromyalgia. The same mud was applied in all diseases and it is a kind of clay contains mineral water. Patients who participated to studies were recruited from among patients seeking medical advice in Outpatient Clinic of Medical Ecology and Hydroclimatology Department of Istanbul Medical Faculty. They are randomized to two groups with a computer method in each study. Research procedures were set according to property of each disease. Temperature of mud and water, treatments of control groups, number of application and application area showed differences. Outcome measures were carried out a blinded physician in certain measurement times (week 0, week 2, week 12, week 24). Results of studies were calculated and analyzed with SPSS statistical program.

Results: Ankylosing Spondilitis: Patients in Group 1 (Hydrotherapy + mud therapy + home exercises) showed superior improvement on pain and Group 2 (supervised exercises + home exercise) had superior development of flexibility and mobility comparing each other.

Knee osteoarthritis 1: Patients in group 1 (traditional group, had hydrotherapy + mud therapy five times per week for 2 weeks) and patients in group 2 (had hydrotherapy + mud therapy two or three times weekly for four consecutive weeks) showed similar improvements on patients with knee osteoarthritis.

Knee osteoarthritis 2: Patients in Group 1 (mineral water bath + mud therapy) and group 2 (tap water bath + mud therapy) showed statistically significant improvement on pain and WOMAC parameters besides Group 1 showed significant improvement on HAQ and SF-36 parameters at the end of therapy period and at week 12 comparing to baseline.

Fibromyalgia: Group 1 (hydrotherapy + mud therapy; consecutively) and group 2 (hydrotherapy + mud therapy; intermittently) had treatment totally same amount. The consecutive or intermittent delivery of ambulatory balneotherapy programs, both are affective in the treatment of fibromyalgia.

Hand Osteoarthritis: Group 1 (had balneotherapy with thermo mineral water) and Group 2 (had mud therapy) assessed as measuring pain, grip strength by hand dynamometer and hand functional indexes. They showed similar improvement after therapy period and it lasts 6 months in both groups.

Rheumathoid arthritis: Group 1 (mud pack therapy + conventional medication) showed
superior improvement on pain and HAQ compared to Group 2 (conventional medication). Mud therapy is an adjuvant therapy for rheumatoid arthritis and it is an effective treatment modality to relieve pain and improve quality of life in short and middle term up to 12 weeks. **Conclusions:** These results indicate that mud therapy has beneficial effects on these various originated rheumatic diseases.

**Keywords:** Rheumatic Diseases, Mud, Hydrotherapy, Balneotherapy