The efficacy of balneotherapy in fibromyalgia syndrome (FS) has been well demonstrated, while controlled studies using mud packs are lacking. We performed a randomized clinical trial to evaluate the effects and the tolerability of mud-bath treatment in FS patients, who are poor responders to pharmacological therapy. Eighty patients with primary FS, according to ACR criteria, were randomly allocated to two groups: 40 were submitted to a cycle of 12 mud packs and thermal baths, and 40 were considered as controls. At baseline, after thermal treatment and after 16 weeks, patients were evaluated by FIQ, tender points count, VAS for “minor” symptoms, AIMS1 and HAQ. Control patients were assessed at the same time periods. A significant improvement of all evaluation parameters after mud-bath therapy and after 16 weeks was observed. Mud packs were well tolerated and no drop-outs were recorded. Our results suggest the efficacy and the tolerability of mud-bath treatment in primary FS.

Keywords Fibromyalgia · Mud-bath treatment · Randomized clinical trial

Introduction

Fibromyalgia syndrome (FS) is a common musculo-skeletal disorder characterized by otherwise unexplained chronic widespread pain, a lower pain threshold, high tender points count (tenderness on examination at specific, predictable anatomic sites known as tender points), sleep disturbances, fatigue, headache, irritable bowel syndrome, morning stiffness, paraesthesia of the extremities, frequent psychological distress and depressed mood [1]. Consequently, FS has a negative impact on working capacity, family life, social functioning and quality of life.

Because of the unknown aetiology and the unclearly understood pathogenesis, there is no standard therapy regime for FS. A variety of medical treatments, including antidepressants, opioids, analgesics, non-steroidal anti-inflammatory drugs (NSAIDs), sedatives, muscle relaxants and antiepileptics have been used to treat FS [1, 2]. Patients often resort to complementary or alternative therapies. Non-pharmaceutical treatment modalities, including exercise, physical therapy, massage, acupuncture, osteopathic manipulation, patient education and cognitive behavioral therapy can be helpful [3].

The efficacy of spa therapy in rheumatic diseases has been bolstered by ancient tradition, due to the chronicity and side effects of many therapies. However, despite the long history and popularity, only few randomized controlled trials demonstrating its effects in patients with rheumatic diseases have been performed [4–12]. Therefore, thermal therapy is still being discussed and its role in modern medicine is still not clear [13].