

Does balneotherapy a good solution to treat fibromyalgia?: a review of the literature

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Introduction: The International Association for the Study of Pain defines pain as "an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage". Fibromyalgia (FM) is a serious health problem with an increasing incidence, which has socioeconomic implications, with negative individual, family and social impact. This chronic disorder is characterized by widespread pain in combination with tenderness in at least 11 of 18 established tender points. In addition to pain, it includes other important symptoms such as fatigue, sleep disorders, cognitive disturbances and a variety of somatic symptoms. The combination of exercise therapy with the warm water may be an appropriate treatment. The aim of this review was to evaluate the benefits and harms of Balneotherapy in adults with fibromyalgia.

Materials and Methods: *Literature Search.* The PubMed/MEDLINE database was searched from January 2015 to January 2018. The literature search was constructed around search terms for "fibromyalgia syndrome" and "balneotherapy" reviews and meta-analyses.

Results: Treatment for FM is usually directed to pharmacological techniques in order to relieve pain, minimize depression and improve quality of life. However, this therapy has limitations and can bring unwanted side effects. Aquatic therapies in warm water are recommended as treatment for FM patients due to the benefits provided in this environment, since water allows immersion and body fluctuation, facilitates the reproduction of compound movements in a safe, varied manner, and minimizes impacts (when compared to exercises in the soil), which can allow the work of bodily mobility and flexibility in a safe and gradual way. In addition, individuals with FM report the sensation of "global relaxation" caused by water, associated with a "relief sensation" of the symptoms, after intervention. Water

buoyancy abolishes gravity thus allowing the body to float, reducing the weight over joints, bones, and muscles and leading to early active mobilization. Also, warm water decreases stiffness and improves pain, while water viscosity provides the required resistance for aerobic and strengthening exercises. Some studies have shown that hydrotherapy may lead to changes in kinematics parameters and that a warm water pool-based exercise program for 12 weeks (2 times/week) led to a positive immediate decrease in level of pain in female patients with fibromyalgia. Improvements were higher in older women and in those with more intense pain.

Other studies that referred that patient education combined with 2 weeks balneotherapy application has more beneficial effects in patients with fibromyalgia syndrome as compared to patient education alone.

Balneotherapy is a multifaceted treatment that uses mineral water taken directly from a natural source and delivered rapidly to the point of use. Delivery is via diverse modalities of showers, baths, pools, and mists. The mineral water can also serve as a vector for massage.

EULAR revised recommendations for the management of fibromyalgia say there was consistency with regard to the evidence for hydrotherapy and balneotherapy, although little evidence to suggest superiority of one over the other.

Conclusions: Nowadays, health professionals agree that non-pharmacological therapy should be the first choice of treatment for FM, leaving the pharmacological therapy as a second-line intervention. It is strongly recommended that FM patients take part in therapeutic balneotherapy programs. It is unclear which volumes, intensities and length of time and intervention are ideas, since they may provide information on the quantity and quality of intervention time required to promote positive changes in the perceptions of individuals with FM and to clarify how they may have an effect more studies are needed.