

# Evidence of the effectiveness of crenotherapy in fibromyalgia

Evidencia de la efectividad de la crenoterapia en la fibromialgia

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## Abstract

**Introduction:** Fibromyalgia is a chronic pain syndrome of unknown etiology associated with sleep disorders, chronic fatigue, anxiety, depression and other symptoms of functional somatic disorders. It is the second most common rheumatic disease, three times more frequent in females. Numerous therapeutic strategies have been used, both pharmacological and non-pharmacological; however, partly due to the multifactorial etiology, treatment of choice remains uncertain. The crenotherapy, an ancient modality, has growing evidence as to its efficacy in this clinical entity.

**Objectives:** To evaluate the evidence for the efficacy of crenotherapy in fibromyalgia.

**Methods:** Review of published literature until May 2014 using the Medline, EMBASE, AMED, Cochrane Library, Web of Science and Scopus.

**Results:** Six randomized controlled trials met the inclusion criteria (a total of 284 patients). Studies (conducted in different spas) showed statistically significant improvement over various parameters such as pain ( $p < 0.005$ ) overall intensity of the symptoms ( $p < 0.001$ ), pain trigger points ( $p < 0.05$ ), depression ( $p < 0.003$ ) and quality of life ( $p < 0.001$ ) in patients receiving crenotherapy.

**Conclusions:** Despite the small number of studies and the limitations thereof, namely the difficulty in constituting randomized double blind control groups, the variability of mineral content in water between different spas and heterogeneity between the study populations, the results favor the use of crenotherapy. The spa, not only by providing treatment due to the different properties of mineral water, but also throughout the surrounding context, seem to play a crucial role in the pathology of this approach (which presents an important functional-somatic and psychological component), minimizing considerable side effects of drug therapy used sometimes abusively this entity. Thus, crenotherapy was a safe and effective modality that should complement the treatment of fibromyalgia.

**Key words:** Crenotherapy, Balneotherapy, Fibromyalgia

**Palabras clave:** Crenoterapia, Balneoterapia, Fisioterapia