**07-2 Evaluation of crenobalneotherapy for knee osteoarthritis, an update of a systematic review**

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**Background**: Although crenobalneotherapy is used commonly for the treatment of knee osteoarthritis, scientific evidence from our previous systematic review on its efficacy was not strong enough.

**Objective**: To conduct an update of a previous systematic review by analyzing each component of crenobalneotherapy separately for knee osteoarthritis.

**Data sources**: A computerized MEDLINE literature search (1966 to October 2013) was performed and personal data and references were added. Studies that compared crenobalneotherapy to any other intervention or to no intervention were selected.

**Study eligibility criteria**: Comparative studies published in English or French, evaluating one of the components of crenobalneotherapy (use of mineral water, massages, showers, baths, mud packs and/or water exercises) on patient with knee osteoarthritis were selected.

**Data collection and analysis**: A checklist was used to assess the internal validity, external validity and the quality of statistical analyses. We analyzed several components of crenobalneotherapy separately. We also analyzed the effect of crenobalneotherapy on 4 types of judgment criteria, pain, function, stiffness and quality of life.

**Findings & conclusion**: Crenobalneotherapy appears to improve pain, function, stiffness and quality of life in knee or hip osteoarthritis patients. The efficacy of multiple mineral interventions, as a whole, including water exercise, has a high level of evidence, but, when analyzed for each component the efficacy is not very well validated except for water exercise and heat application. Additional studies with higher methodological quality and larger sample sizes are needed.

**Keywords**: Osteoarthritis, Balneotherapy, Hydrotherapy, Massage, Water exercise