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SAT0355 MBST® NUCLEAR RESONANCE THERAPY IMPROVES REHABILITATION OUTCOME IN PATIENTS WITH LOW BACK PAIN

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Background: In modern multi-disciplinary rehabilitation therapies, one searches for concepts that include new methods that are promising in respect to pain induced disabilities. In contrast to static magnetic fields, pulsating electromagnetic fields have been shown to induce positive biological reactions (1). Recently, a special form of the magnetic resonance technology has become available for use in therapeutic programs. The new method uses highly complex, alternating magnetic fields based on nuclear resonance frequencies (MBST®, Multibiosignal Nuclear Resonance Therapy).

Objectives: To investigate the effects of nuclear resonance therapy in patients with low back pain.

Methods: Within the scope of a randomized, double-blind, placebo-controlled study, 62 patients suffering from chronic low back pain, during a stationary rehabilitation stay with standardized physiotherapeutic measures were examined. The MBST was applied for one hour each day on five successive days. Before therapy was started, after one week and again three months after the MBST was completed, the pain at rest and under movement was evaluated using the Visual Analogue Scale (VAS). At the same time, two widely used condition-specific measures for back pain, the Roland-Morris Disability Questionnaire (RMDQ) and the Oswestry Disability Index (ODI) were applied (2).

Results: The VAS pain measurements showed a distinct reduction of pain during the rehabilitation procedure whereby the reduction was most distinct within the MBST® verum group. RMDQ and ODI distinctly showed significant improvements during the stationary rehabilitation programme in both study groups with slight advantages for the MBST® verum group in respect to some items of the questionnaires. It seems interesting to note that the RMDQ and ODI of the verum group continued to show an improvement after three months ($p < 0.00001$; $p < 0.01$). In comparison, the placebo group, at the end of the three month period did not show any significant change for both scores in relation to the initial values.

Conclusion: Whereas the effects of the standardized physiotherapy fade away about three months after treatment, additional MBST® treatment can result in a much longer relief of painful chronic low back pain. Effects of structural modification, similar to those already shown to occur in respect to joint cartilage tissue (3) are possible after 3 months. The MBST® method is an interesting, easily applicable treatment procedure that can be used for patients suffering from chronic low back pain in addition to other rehabilitative therapeutic measures. In our study this additive method has shown distinct positive results over 12 weeks.

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