

Pulsed Magnetic Field Versus Ultrasonic in Treatment of Patients with Chronic Mechanical low Back Pain

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ABSTRACT

Back ground and purpose of the study: Non-specific mechanical low back pain (LBP) is a major health problem that frequently restricts patient's daily living activities. The purpose of this study was to compare between the efficacy of two physical therapy modalities; pulsed magnetic field and ultrasonic on back pain, spinal range of motion, and functional activities in treatment of patients with mechanical low back pain.

Patients, Materials and Methods: Thirty male patients with chronic mechanical LBP, age ranged from 30:45 years. The patients were assigned randomly into two equal groups: group (A) received ultrasonic therapy and exercise program; group (B) received the same exercise program plus pulsed magnetic field. The physical therapy program was applied every other day for eight weeks. **Results:** There were a statistical significant reduction in pain, increase spinal range of motion and improvement of functional activities in group B compared to group A. **Conclusion:** Pulsed magnetic field has superiority in treating patients with LBP in term of pain reduction, improvement in spinal range of motion and functional activities compared to ultrasonic therapy.

Key words: Magnetic field – Mechanical low back pain –Ultrasonic therapy.