

# SOME RESULTS OF ELECTROTHERAPY FOR MUSCULOSKELETAL DISORDER

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## Abstract

**Background:** Electrotherapy is one of the most widely used methods of rehabilitation. Phenix Liberty is a first device designed to electro couple and wireless remote biofeedback.

**Objective:** We aimed to evaluate the results of electrotherapy for some musculoskeletal disorders using the Phenix liberty device.

**Methods:** We analysed data from 184 people who had been treated at AruMed neurological clinic over the past year using the Phenix Liberty device. In addition, 40 patients with chronic and acute low back pain were compared for before and after of treatment of pain using the "Numerical rating scales of pain"

**Results:** About 75.5% of the 184 people who received electrotherapy had back pain, of which 29.5% (n=41) had radicular pain and 70.5% (n=98) had non-radicular back pain. The remaining 24.5% (n=45) received electrotherapy for other conditions. There was an 80-100% improvement in the treatment outcome for each group of patients. Treatment was more effective in people who used at least 10 days in combination with more than 2 types of programs, such as analgesia, muscle relaxation, peripheral neuromuscular recovery, anti-inflammatory, reducing edema, and blood circulation improvement. In patients with chronic and acute low back pain, the intensity of pain decreased from 8.2 ± 0.9 to 1.1 (0-3) after treatment ( $p = 0.03$ ).

**Conclusion:** The electrotherapy of the Phenix Liberty device plays very important role in treating in various musculoskeletal disorders. The outcome of treatment depends on the choice of program, the combined use of several programs, and the frequency of courses of treatment.

**Keywords:** Rehabilitation, electrotherapy, low back pain, musculoskeletal disorder, phenix liberty