

## Mirzoyan, Knar et al, 2016 Abstract

Physiotherapy and **Electrical Stimulation** On Rheumatoid Arthritis

### Objective

The researchers studied the effects of physiotherapy and **electrical stimulation (ES)** therapy both applied together and separately (individually) on the hand and arm function of women with rheumatoid arthritis (RA).

### Results

The evaluated indicators improved statistically significantly in both groups. Comparing both groups with each other after the study, a statistically significant difference was found in the assessment of the amplitude of the bending movements of the left hand.

The researchers concluded that physiotherapy and **electrostimulation**, when applied both together and separately, are the same effective in improving hand function in women with rheumatoid arthritis. Previous research has found that muscle electrostimulation also has a positive effect on hand grip strength and fatigue resistance in rheumatoid arthritis patients with hand muscle atrophy.

### Participants and Researchers

Fifteen women with rheumatoid arthritis, whose disease duration is up to ten years, were studied. Subjects were randomly selected into two groups - the first with seven participants and the second group with eight patients.

The researchers were Knar Mirzoyan and Inesa Rimdeikiene from the Rehabilitation Clinic of the Lithuanian University of Health Sciences, Lithuania.

### Methods

Physiotherapy and muscle **electrostimulation** using the **NeuroTrac Rehab** device (Verity Medical) were applied separately to the patients of the first group, while physiotherapy and muscle electrostimulation, again with the **NeuroTrac Rehab** unit were applied simultaneously to the second group. The intensity of pain, the amplitude of the extension and flexion movements of the hands of both hands, the grip strength of the hands and the functional condition of the hands were evaluated.

Physiotherapy and muscle **ES** procedures were applied to the subjects every day, except Saturdays and Sundays. A total of ten procedures were performed.

The full abstract can be found at

<https://journals.lsu.lt/reabilitacijos-mokslai/article/view/705>.