

ABSTRACT

Title of thesis: The effect of group exercise on the perception of pain and spinal mobility of Individuals with ankylosing spondylitis

Aims: To evaluate the impact of a targeted group exercise on pain perception, posture and mobility of the spine in patients with ankylosing spondylitis (AS).

Method: The study selected 30 subjects with AS in I. - III. stage (mean age = 27.17 ± 4.57). This group was divided into experimental set (motion program participants (n = 15) and control group [n = 15]). The motion program was 30 minutes 2 times a week for 5 months. Pain was assessed using a visual analogue scale before each training unit and after it. Program before and after the following parameters were evaluated: static posture (the method by Klein and Thomas Mayer modified), the development of lumbar and thoracic spine stretch the chest and circuits.

Results: The results showed that the group with targeted physical therapy in the form of group exercises significant reduction in pain intensity (condition improved by 32.2%), improved posture ($p < 0.001$), increased mobility of the spine (the difference was statistically significant at Schober, Stiborova and Thomayer distance and reclining torso [$p < 0.05$] and increased chest circumference [$p < 0.001$]). For the control group occurred in most of the monitored parameters only insignificant changes.

Keywords: Ankylosing spondylitis, group exercise, pain, posture, spine mobility