## **Abstract**

Backgraound: Low back pain is one of the most common neurological complaints. It affects young people, but have a slow progression even at a later age. LBP is a condition with a rich clinical picture - pain, severely limited range of motion in the spinal column (especially in the area of the L4-L5 segment) and sacro-iliac joints, difficulty walking. Physiotherapy has an essential role in maintaining the general condition and improving the quality of life for this contingent of patients.

Aim: The aim of the present study is to create and approve a physiotherapy methodology for pain reduction in patients diagnosed by a neurologist - Radiculitis of the lumbo-sacral plexus.

Methods: 20 clinically proven patients divided into two groups were included in the study. After signing informed consent declarations and assessment of anthropometric data (age, height and weight), the subjects were evaluated with neurological tests such as: Lasegue test and dolorimetry. Results were also reported on the Barthel index scale.

Results: The dynamics of dolorimetry results, quality of life and mobility in the spine area (especially the lumbar segment) were monitored in the two studied groups, with the results in the experimental group demonstrating better values (p<0.0001).

Conclusion: There is no unified system for pain reduction in patients with low back pain. As a result of applied physiotherapy, including modern techniques for myofascial massage, a faster increase in joint mobility in the area of the spine and sacroiliac joints, an improvement in muscle strength and, above all, a reduction in pain symptoms were found.

Keywords: low back pain, physiotherapy, quality of life.