

PRELIMINARY RESULTS FROM THE STUDY

IMPACT OF SPINAL DECOMPRESSION THERAPY ON DISABILITY, PAIN AND MENTAL HEALTH IN PATIENTS WITH LUMBAR DISC HERNIATION

ADRIANO TORRES MARTÍN, YACO CLIMENT CARMONA
Vitalys Center, Spain

Under peer-review process

ABSTRACT

The aim of this study was to determine impact of non-invasive spinal decompression therapy on pain, disability and mental health in patients with lumbar disc herniation. A retrospective pilot trial was conducted by an independent clinic in Spain.

Questionnaires of 19 patients diagnosed with lumbar disc herniation treated with spinal decompression (BTL Industries Ltd.) treatment protocol were reviewed - Patient Health Questionnaire-9 (PHQ-9), Visual Analog Scale (VAS) and Oswestry low back pain questionnaire (ODI) as a measure of depression severity, pain perception and disability, respectively.

Significant improvement ($P < 0.05$) of all parameters was reported after 6 treatment sessions. PHQ-9 score improved by 66.44%, VAS by 61.15% and ODI by 66.42%. Significant large positive linear relationships ($P < 0.05$) between depression severity and pain and between depression severity and disability were noted.

Non-invasive spinal decompression device proved to be an effective tool in treatment of patients with lumbar disc herniation experiencing psychiatric symptoms of various extent in terms of disability, pain and depressive symptoms.

VAS

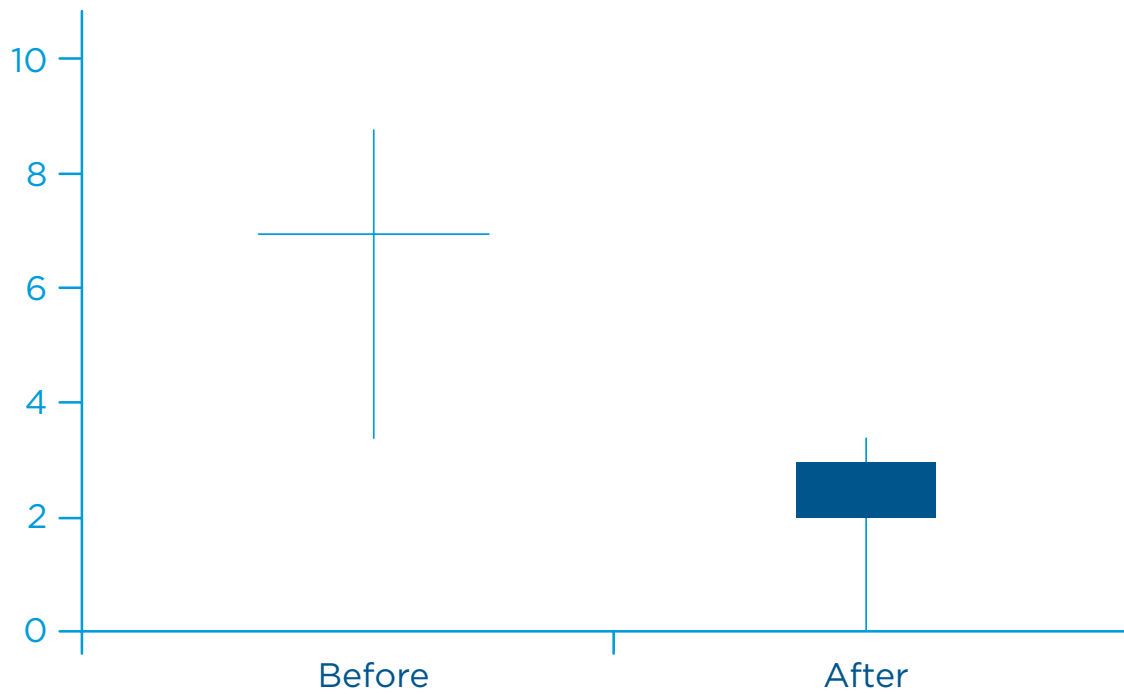


Fig. 1: Representation of VAS data via a box plot graph. Significant decrease after the last therapy session was observed.

OSWESTRY DISABILITY INDEX

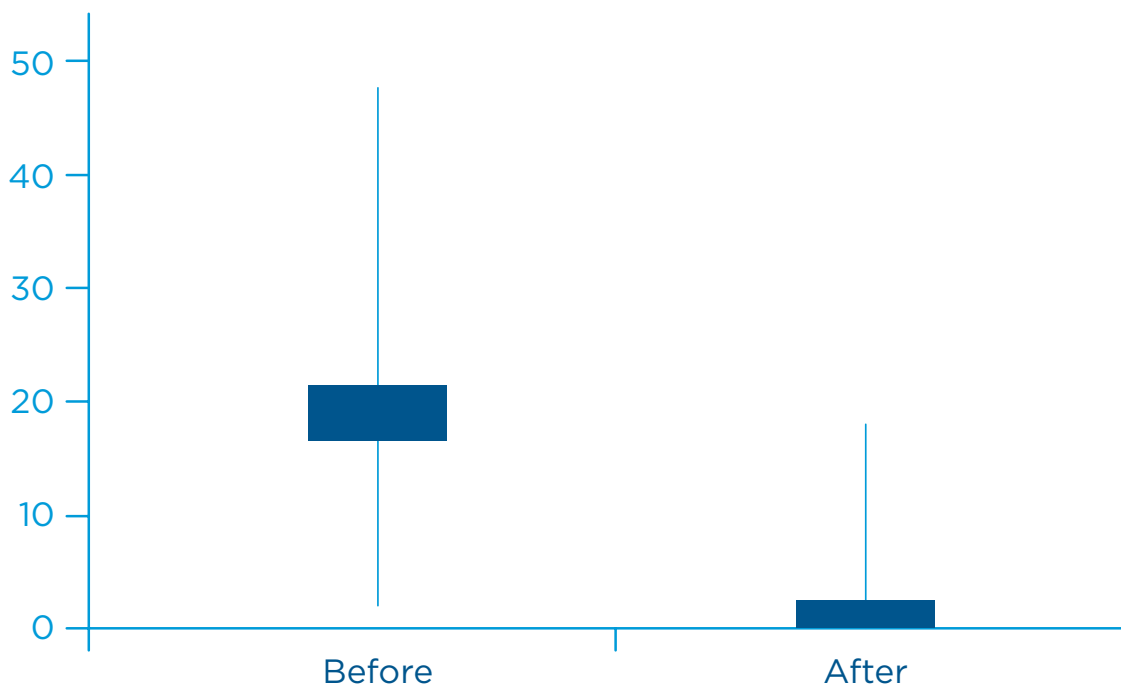


Fig. 2: Comparison of before and after ODI data distribution.