Improvement of algo-dysfunctional syndrome by postural therapy in lumbosacral spine diseases

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Abstract

Background. Patients with lumbosacral pathology are one of the most common groups that are consulted in rehabilitation services, on account of the algo-dysfunctional syndromes caused by these diseases.

Aims. Achievement of a prospective, randomized study regarding the efficiency of the physical-kinetics recovery program with the emphasis on postural therapy in two groups of patients with lumbo-sacral spine diseases (radiculopathies, low back pain, sequelae after lumbar disk herniation surgery, lumbar canal stenosis); utilization of a clinical-functional assessment following the evidence-based research model.

Methods. The groups (1-experimental, 2-control) each comprised 60 patients of both sexes and different ages, with lumbosacral spine diseases. The differentiation between the two groups was achieved using a methodology of recovery whereby therapy-group 1 received postural therapy as part of the physical-kinetics program. The following clinico-functional parameters were assessed: pain, physical dysfunctions (fingertip-to-floor-test, lumbosacral spine static disorders, muscle strength, Lassegue, osteotendinous reflexes), disabilities (ADL, movement ability, absenteeism, work ability-return to activity).

Results. Pain improved by 67.40% (group 1) vs. 56.53 (group 2); cumulated physical dysfunctions improved by 42.49% (group 1) vs. 32.67% (group 2). Cumulated disabilities score recorded improvements of 69.40% (group 1) vs. 59.14% (group 2).

Conclusions. The results of this study show a higher efficiency for the recovery process that includes an optimized postural therapy methodology for patients with lumbosacral spine diseases (radiculopathies, low back pain, sequelae after lumbar disk herniation surgery, lumbar canal stenosis) in the improvement of pain, physical dysfunction and disability scores.

Keywords: lumbosacral spine diseases, postural therapy, algo-dysfunctional syndrome, disabilities.