



# CERVICAL DEGENERATIVE RADICULOPATHY AND NEUROREHABILITATION

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**The aim** of this study is to monitor the effect of rehabilitation in patients with surgical decompression for cervical degenerative radiculopathy.

**Material and methods:** The study was conducted in 17 patients (middle age 42 years) due to degenerative changes in the cervical vertebrae in the early postoperative period, on the 5th day of the operation. The patients were divided into two groups - 11 patients with artificial disc replacement and 6 patients with spinal fusion. In both groups, the methods of rehabilitation is the same and is evaluated the index for limitation of movement (NDI) and the amount of movement in the cervical region, by goniometry. Phase I (protective phase until the second week) - the patient may have a cervical corset; Phase II (fortification phase two to six weeks) - active movements in the cervical region of the spine are applied. Phase III (after the sixth week) - includes manual therapy, stretching exercises and exercises as in Phase II. Applicable: electrical stimulation (before the procedure); massage (segmental); passive exercises; active exercises with help from a physician, exercises from a disused starting position - gravity, manual assistance, in the aquatic environment; reciprocal innervation; PNMU - facilitating and stimulating techniques.



Fig.1 discs treated with ADR (right) as compared to cervical fusion (left) in a follow-up X-ray of a degenerative disc disease patient.

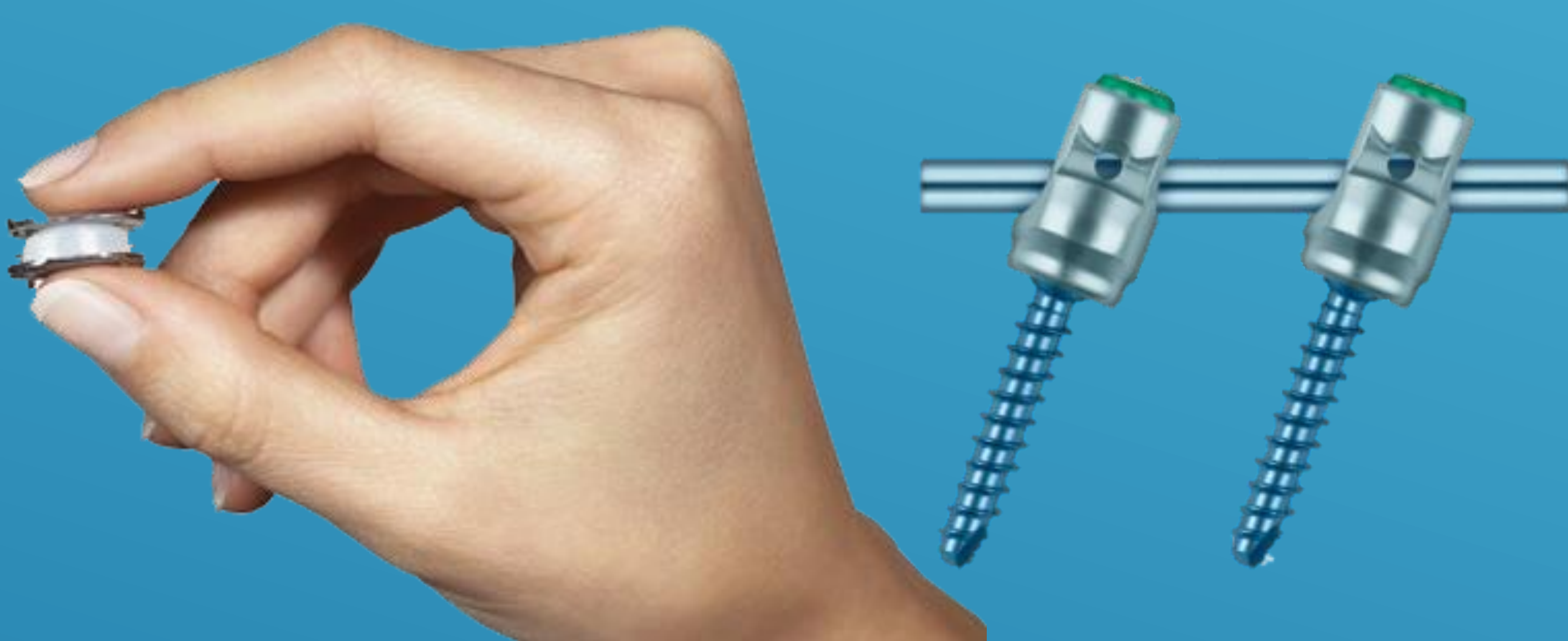


Fig.2. Artificial disc (left) and disc fusion rods (right)

**Results:** The NDI results are approximately comparable in the two groups with a significant level of  $p = 0.48$ . This study indicates that the rehabilitation improves the functional capacity of patients with cervical degenerative radiculopathy with a significance level of  $p < 0.05$ .

**Conclusion:** In patients with cervical degenerative radiculopathy, rehabilitation after surgical decompression and artificial disc replacement leads to good clinical results.

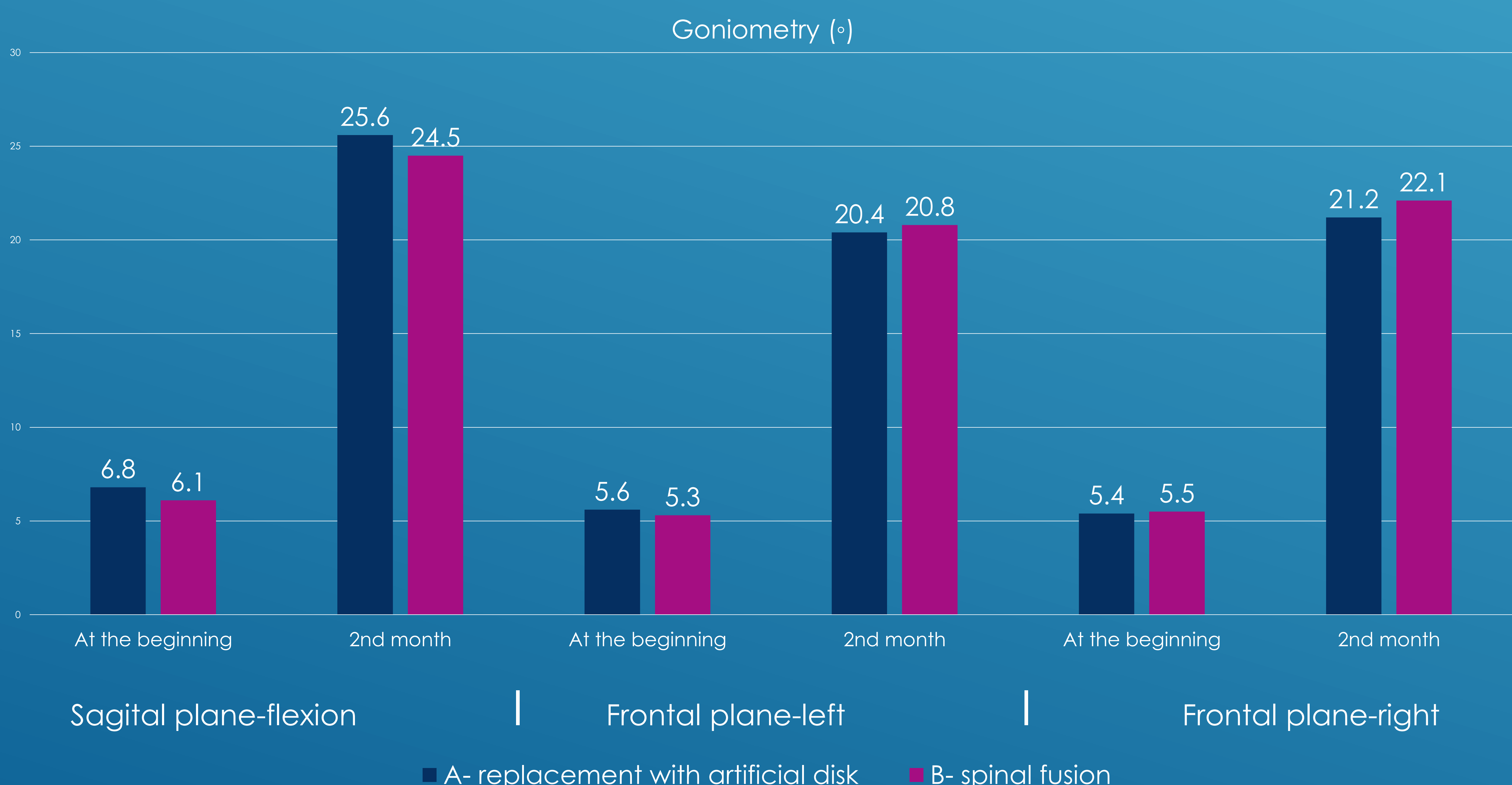


Fig.3

**Keywords:** cervical radiculopathy, neurorehabilitation