Lumbar disc herniation. A controlled, prospective study with ten years of observation.

Weber H.

Abstract

Two hundred eighty patients with herniated lumbar discs, verified by radiculography, were divided into three groups. One group, which mainly will be dealt with in this paper, consisted of 126 patients with uncertain indication for surgical treatment, who had their therapy decided by randomization which permitted comparison between the results of surgical and conservative treatment. Another group comprising 67 patients had symptoms and signs that beyond doubt, required surgical therapy. The third group of 87 patients was treated conservatively because there was no indication for operative intervention. Follow-up examinations in the first group were performed after one, four, and ten years. The controlled trial showed a statistically significant better result in the surgically treated group at the one-year follow-up examination. After four years the operated patients still showed better results, but the difference was no longer statistically significant. Only minor changes took place during the last six years of observation.

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Spontaneous regression from intervertebral disc herniation. Propos of a series of 37 cases.

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Abstract

INTRODUCTION:
The intervertebral disc disease (IDD) is one of the most common muscle-skeletal disorders, causing both high work disability and elevated healthcare costs. There are two specific origins of disk disease that should be kept in mind: degenerative (DDD) and traumatic (TDD). Concerning the TDD, nowadays it has not been determined which patients could gradually improve and which ones will require surgery. Some studies indicate that about 85% of lumbar and 90% cervical acute disc herniation will get better in an average of 6 weeks.

MATERIALS AND METHODS:
We conducted an observational, prospective study, over a group of 858 patients, with the following inclusion criteria: 1. MRI imaging indicating TDD, 2. No signs or symptoms requiring urgent surgical treatment (cauda equina syndrome, progressive or serious motor deficit or unbearable pain) and 3. Development of progressively spontaneous symptoms remission. All of the patients included in our study were treated in our Department of Neurosurgery from 2006 to 2007. Patients were tested for disc herniation regression with a second MRI study.

RESULTS:
A spontaneous regression of their hernia was appreciated as follow: 33 cases of lumbar hernia (29 male, 4 female), 3 cervical hernia (1 male, 2 female) and 1 dorsal hernia (male).

DISCUSSION:
Research about other reported series was done, and the different factors that could take place in disc spontaneous regression were analyzed: a) lodgement of the herniated disc back into the intervertebral space; b) disappearance of the herniated fragment due to dehydration and retraction mechanisms; c) gradual resorption of the herniated tissue by phagocytosis and enzymatic degradation induced by an inflammatory reaction that appeared as the disc (acting the extrusion itself as an foreign body) and, d) pulsion of cephaloarchidian liquid against the herniated portion.

CONCLUSIONS:
Disc herniation can regress, or even disappear, in a number of patients, rendering the radiological findings not to be taken as the only surgical indication criterium. We consider that the best treatment is the one relying on a good doctor-patient relationship, suspended in a balance between conservative and surgical treatment. According to clinical data, the first one (conservative) should not exceed the estimated time beyond which the surgical result would be unsatisfactory. The second one (operative), excepting *need-to-operate* situations (such as cauda equina compression, progressive or serious motor déficit, or unbearable pain), should be prudently supeditted to MRI regresión control, in particular in patients in which a
clinical improvement is observed. Thus, the disc herniation conservative healing, both clinical as radiological, do exist, being a concept to widespread among clinicians and patients also.

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