

TitleTreatment of lumbar disc herniationAgencySMM, The Norwegian Center for Health Technology Assessment
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Aim

The aim of the present report is to summarise the documentation on treatment of patients with lumbar disc herniation and nerve root affection.

Conclusions and results

Conservative treatment - Traction of patients with lumbar disc herniation has no effect. Furthermore, no positive effect was found for non-steroidal anti-inflammatory drugs (NSAIDs). Documentation is limited and somewhat weak as regards behavioral interventions, physical training, and electrotherapy (eg, electro-acupuncture and ultrasound), and further clinical research is warranted. No studies of manipulation of acute disc herniation were found. Moderate evidence was found in the literature that would encourage patients with lumbar disc herniation to return to light daily activities instead of bed rest. However, some patients initially have severe pain and have no other option than to stay in bed until the most severe pain has tapered off. Clinical controlled trials show that postoperative guided training can be valuable and lead to reduced pain and increased physical function, but the long-term effects are less impressive.

Invasive treatments - Some patients need emergency treatment, eg, surgery for cauda equina syndrome. Also patients that need sustained opiode-like drugs for long-lasting strong pain are candidates for surgery. Chemonucleolysis and percutaneous discectomies are chemical and mechanical degradation, respectively, of the lumbar disc. Studies of good methodological quality show that chemonucleolysis (chymopapain) is significantly better than placebo. Only limited and contradictory evidence indicates that percutaneous discectomies yield inferior results compared to surgery, and more studies are needed. Discectomy is indirectly documented: Chemonucleolysis is more effective than placebo, and discectomy again shows a somewhat better effect than chymopapain. Discectomy has good effect in selected patients who have not responded to conservative treatment. No difference between microdiscectomy and standard discectomy. The technique led to less postoperative pain and shorter rehabilitation compared to discectomy, but the study showed no differences in the patients' ability to return to work and perform normal activity or physical function.

Methods

A literature search was performed in MEDLINE, Embase and Cochrane Trial Register. SBU Report 145/ 1-2 was also used in the assessment.

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