A overview of systematic reviews of management of lumbar disc herniation

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Background Patients with lumbar disc herniation are treated by different management. There is no overview of systematic reviews on these interventions.

Objectives To summarize recent systematic reviews from any interventions for patients with lumbar disc herniation.

Methods Literature searches were carried out through six electronic Databases for all systematic reviews of management for lumbar disc herniation, published between 1978 and October 2011.

Results and conclusion In total, 37 studies were identified, 12 of which were with low risk of bias. Six studies compared different surgeries with conservative management. There is considerable evidence that surgical discectomy provides effective clinical relief for carefully selected patients that fails to resolve with conservative management. However, no significant differences were found between surgery and conservative care in any of the clinical outcomes after 1 to 2 years, but the evidence is of very low quality. 22 studies compared different surgeries. There were no significant differences in the treatment outcome and the operation time between standard discectomy and microendoscopy discectomy; microendoscopy discectomy was superior to open lumbar disectomy in intraoperative blood loss, time in hospital and the time out of bed after operation. Current data suggested that the microsurgical and endoscopic techniques are superior to the classic technique for the treatment of single level lumbar disc herniations with respect to volume of blood loss, systemic repercussions, and duration of hospital stay. There was strong evidence for transforaminal injections in the treatment of lumbosacral radicular pain for both short term and long term relief. The evidence for other minimally invasive techniques such as chemonucleolysis, automated percutaneous discectomy, nucleoplasty, oxygen/ozone and laser discectomy remains unclear except those not provided valid information to either support or refute using them. 11 studies compared different TCM management. There was evidence that TCM treatment on lumbar disc herniation is safe and effective, but the methodological quality of these studies was poor, and the conclusion remained uncertain. Future studies should evaluate economic indicators among different interventions.