

Sinikallio S, Aalto T, et al. Depression Is Associated With a Poorer Outcome of Lumbar Spinal Stenosis Surgery. A Two-Year Prospective Follow-up Study. Spine 2010; [e-pub ahead of print; will supply volume and page numbers when it is published in print]

Reviewed, no change to conclusions, November 2016

Design: Observational cohort study

Population/sample size/setting, and main outcome measures: See review of Sinikallio et al 2009; this is a two-year follow-up of the same operative cohort, with the same methods and same three logistic regression models

- In the logistic models for the 2 year follow-up, depression continued to be associated with poorer outcomes on the Oswestry, pain VAS, symptom severity scale, and walking capacity
- Although the “depressive burden” (the sum of the Beck Depression scores at baseline, 3 months, and 6 months) was associated with pain VAS in the 1-year follow-up, this association was not observed at the 2 year follow-up
- Among patients who had high depression scores at baseline but recovered in the postoperative period, the outcomes were almost as favorable as among those who did not score high on depression at baseline
- Only 7 patients reported being on antidepressant medication at 2 years; 3 of these were in the normal mood group, 3 in the constant depression group, and 1 had emergence of depression after the baseline measurement

Authors’ conclusions:

- Depressive symptoms in the preoperative and early recovery phase are strong predictors of recovery postoperatively
- Treatment of depression should be included in treatment plans for lumbar stenosis surgery

Comments:

- The same pattern that was observed at 1 year was continued at 2 years: depression was more strongly associated with poor functional gains than with lasting pain
- As the authors acknowledged in the 1-year study, the Beck inventory is not a diagnostic tool; not all patients with a higher than average score would necessarily be candidates for antidepressant medication

Assessment: Adequate for evidence that depression at the time of surgery and in the early recovery period is associated with poorer functional recovery at 2 years, even though it does not appear to be associated with worse pain at 2 years