Abstract

Lumbar Stenosis Outcome Study (LSOS): Two-Year Follow-Up Results of a Multicenter Cohort Study in Patients with Symptomatic Degenerative Lumbar Spinal Stenosis

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Purpose
Lumbar spinal stenosis (LSS) is a frequent condition in elderly patients. In patients with moderate to severe symptoms different conservative and/or surgical treatment modalities are recommended. It is still unclear which treatment is the most adequate for a specific patient. PURPOSE: We report the preliminary findings of the 2-year follow-up of the thus far included patient population in the Lumbar Stenosis Outcome Study (LSOS), an ongoing cohort study of patients treated for symptomatic degenerative LSS.

Methods/Materials
STUDY DESIGN/SETTING: Multi-center cohort study in Switzerland. PATIENT SAMPLE: Patients with neurogenic claudication and radiological findings of LSS included in the LSOS and completed 24-months follow-up assessment. OUTCOME MEASURES: The disease specific spinal stenosis measure (SSM). The SSM consists of a symptom (SSM-sy, range: 1–5) and a function (SSM-f, range: 1–4) subscale. A Minimal Important Difference (MID) for the SSM-sy is 0.48, for the SSM-f 0.52. Health-related quality of life was measured using the EuroQol-5D (EQ-5D, range: 0–100). METHODS: Descriptive statistics will be used to describe the patient population included in this cohort study between December 2010 and December 2015.

Results
Between December 2010 and December 2015, 861 patients agreed to participate and 347 patients (40%) completed the 24 months follow-up (107 patients [13%] dropped out, 47% did not complete 24 months followup). The median age was 75 years (IQR 68; 80), 53% were female. Treatment modalities included conservative care in 29 (8.3%) patients, epidural injections in 95 (27.4%), and surgical treatment in 223 (64.3%). Baseline SSM-sy was higher in the surgical group (median 3.1, IQR 2.7–3.6) and lowest in the conservative care group (median 2.5, IQR 2.1–3.1). Baseline SSM-f was similar in all groups.

Conclusion
At the 2-year follow-up we found a higher proportion of patients in the spinal surgery group reporting MID for pain and disability compared to patients undergoing infiltration or conservative treatments. Patients undergoing surgical treatment reported an improvement in the health-related quality of life whereas the health state in the other groups remained unchanged.