Clinical: Complications

Complications and Results of Revision Spine Surgery

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Introduction: Revision spine surgery is sometimes necessary due to adjacent segment degeneration, recurrent stenosis, and . The purpose of this study was to review our revision spine procedures to determine the rate and nature of complications, such as infections and dural tears and their rate on reoperation and outcome.

Methods: A retrospective chart review of 119 consecutive revision spine cases performed by our single senior surgeon from August of 2003 to November of 2007 was done and all complications, adverse events, reoperations and presence of intraoperative pseudoarthroses were noted. The mean patient age was 58 years. Revision procedures included lumbar laminectomy, foraminotomy, microdiscectomy and instrumented fusion. Inclusion criteria were any patient who underwent revision surgery at the same level or adjacent level as a previous procedure.

Results: Of the 119 cases reviewed, 12 (10.1%) had postoperative wound infections and 22 (18.5%) had durotomies requiring repair. Wound infections were aggressively treated with irrigation and debridement and IV antibiotic therapy followed by a course of oral antibiotics. No patients had to have any further surgeries to manage chronic wound infections or osteomyelitis. Durotomies were repaired primarily. Patients did not have any long term sequelae fistulas form as a result of the durotomies. Patients who had wound infections and durotomies treated had equivalent outcomes and did not have worse outcomes 5 years post operatively.

Conclusions: Despite a higher rate of post-operative wound infections and durotomies, revision spine surgery still has the potential for good outcomes. If wound infections are treated with aggressive debridement and antibiotic therapy and durotomies are treated with good primary closures, they have a good chance of having equivalent outcomes as patients who did not have a post-operative wound infection or durotomy.