Analysis of Complications with XSTOP
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Introduction: The Xstop is a minimally invasive interspinous distraction device for the treatment of lumbar spinal stenosis. Previous studies have demonstrated the clinical effectiveness of the Xstop. No large series of Xstop complications with over 3 year follow up have been reported to date.

Objective: The objective of this study was to perform an analysis of complications on a consecutive series of patients treated with the Xstop.

Methods: Outcomes data was prospectively collected on a consecutive series of 300 patients with degenerative lumbar stenosis treated with the Xstop from January 2006 through August 2007. This group included patients with or without low grade degenerative spondylolisthesis. Patients were evaluated for complications at regular intervals following implantation of the Xstop. Standard outcomes data including ODI was also collected.

Results: Follow up ranged from 3 - 4.5 years. There were no deaths, major medical complications or new neurologic deficits related to the Xstop. Twenty patients (6.7%) had postoperative complications and ten patients (3.3%) underwent reoperation. There were 5 cases of spinous process fracture and or device migration, 3 new postoperative radiculopathies, 1 infection, 1 superficial hematoma. Six patients underwent revision Xstop placement, three patients had their Xstops were removed and one was revised to a posterior fusion and laminectomy. Average ODI improved by 34.4 on a 100 point scale.

Conclusions: In our series of 300 patients the Xstop was associated with low complication and reoperation rates. There were no deaths, major medical complications or neurologic deficits associated with the Xstop in our study group. Furthermore the study patients had substantial clinical improvement in ODI score at final follow up of 3 - 4.5 years.