

Introduction

Minimally invasive spine surgery presently encompasses several modalities and continues to evolve as surgeons and patients alike seek surgical techniques that least disrupt the human frame. Single port irrigated endoscopic spine surgery, gaining popularity in Europe and Asia, uses an incision less than 1 centimeter in diameter for minimal tissue destruction to accomplish similar surgical outcomes as existing techniques. The object of this abstract is to present University of New Mexico's initial experience with endoscopic spine surgery focusing on intralaminar synovial cyst resection.

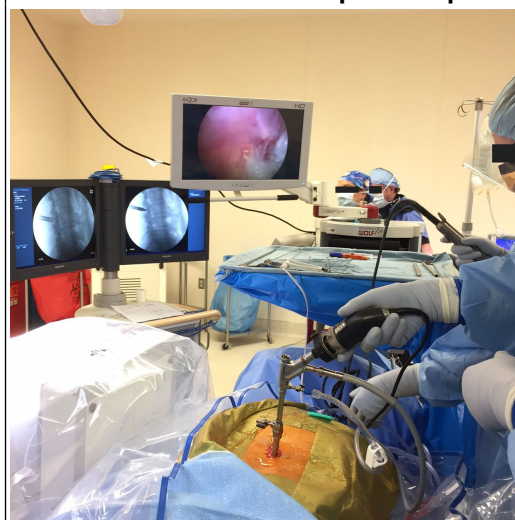
Learning Objectives

The object of this study is to present University of New Mexico's experience with endoscopic spine surgery in treating intralaminar synovial cysts and our surgical outcomes. By the conclusion of this session, participants should be able to: Identify single port irrigated endoscopic spine surgery as a potential alternative to currently popular methods of treatment for intralaminar synovial cysts.

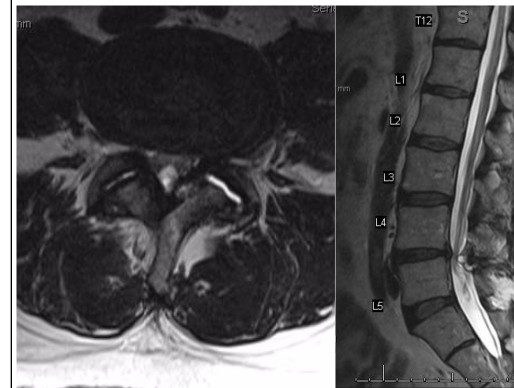
Methods

From February 2016 to December 2016, University of New Mexico endoscopic spine surgery team treated 3 patients with lumbar facet synovial cysts. Their pre-operative symptomatology and post-operative outcomes were tracked. One patient had a left interlaminar L2-3 unilateral approach to bilateral laminectomies with resection of synovial cyst. One patient had a right interlaminar L3-4 unilateral approach to bilateral laminectomies and resection of synovial cyst. One patient had a left interlaminar L4-5 unilateral approach to bilateral laminectomies with resection of synovial cyst.

Interlaminar endoscopic set up



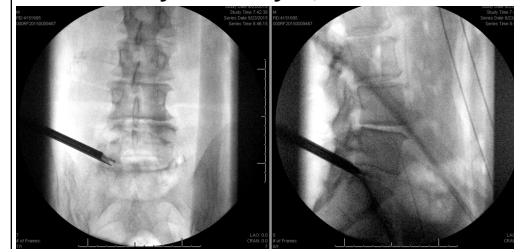
Synovial cyst, MRI



Results

One patient had right-sided radiculopathy that completely resolved after surgery. One had chronic low back pain that radiated into the legs as well as right greater than left leg weakness. Post operatively, his back pain was much improved, but he had little functional improvement due to chronic severe knee pain. Another patient had neurogenic claudication and urinary urgency which resolved immediately post-op, but had a return of some symptoms several months later, less severe.

Synovial cyst, fluoro



Conclusions

Single port irrigated endoscopic spine surgery does present particular challenges to the surgeon such as a steep learning curve regarding surgical technique and identifying indications and limitations of surgery; however, it is a modality offering comparable surgical outcomes to other minimally invasive techniques with added benefit of less adjacent tissue destruction and reduced recovery time.



References

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