

Early Experience with dualPortal Endoscopic Spine Surgery

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Disclosures

Consultant: Atec, SI BONE, Amplify, SeaSpine, LifeSpine, Medtronic

Fellowship/research: Atec, Medtronic, Amplify, Globus



Residency training

Orthopaedic surgery
residency:

- Loved arthroscopy/
techniques
- Loved ortho sports
recovery and outcomes
- Loved visualization



Fellowship training

Orthopaedic trauma fellowship:

- Pelvic and acetabular surgery
- Modern techniques allow MIS advantage of soft tissue and achieve of stabilization



Fellowship training

Combined spine
ortho/neuro fellowship

- Mostly open
posterior fellowship
- Significant revision,
deformity and trauma
volume
- No tubes



Early practice

Revision, deformity, trauma, tumor.....

But then I saw the light



Early practice- dual portal

Senior partner

Mentorship

Indications

Pre/post conferences

Self-assessment



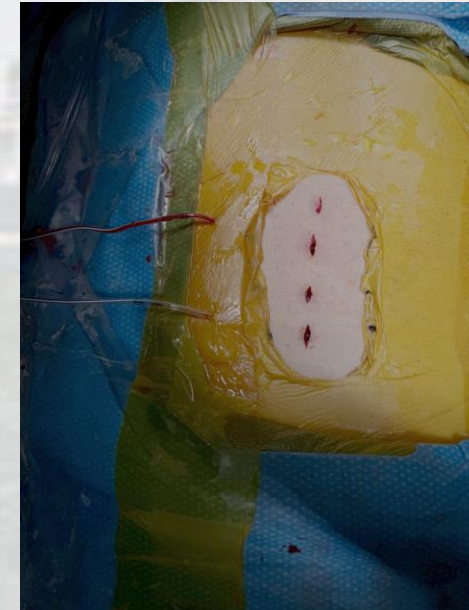
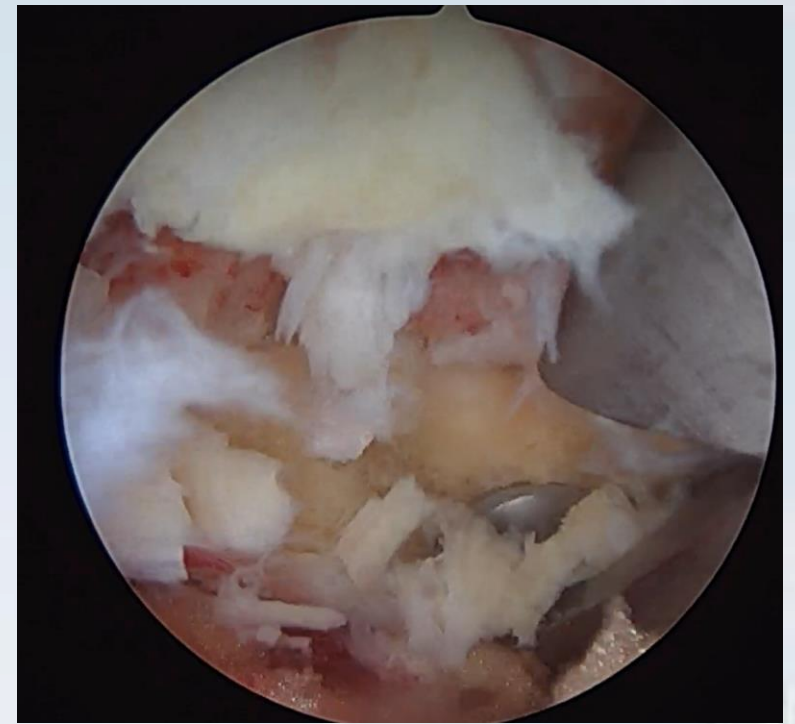
Early practice- dual portal

Lab practice:

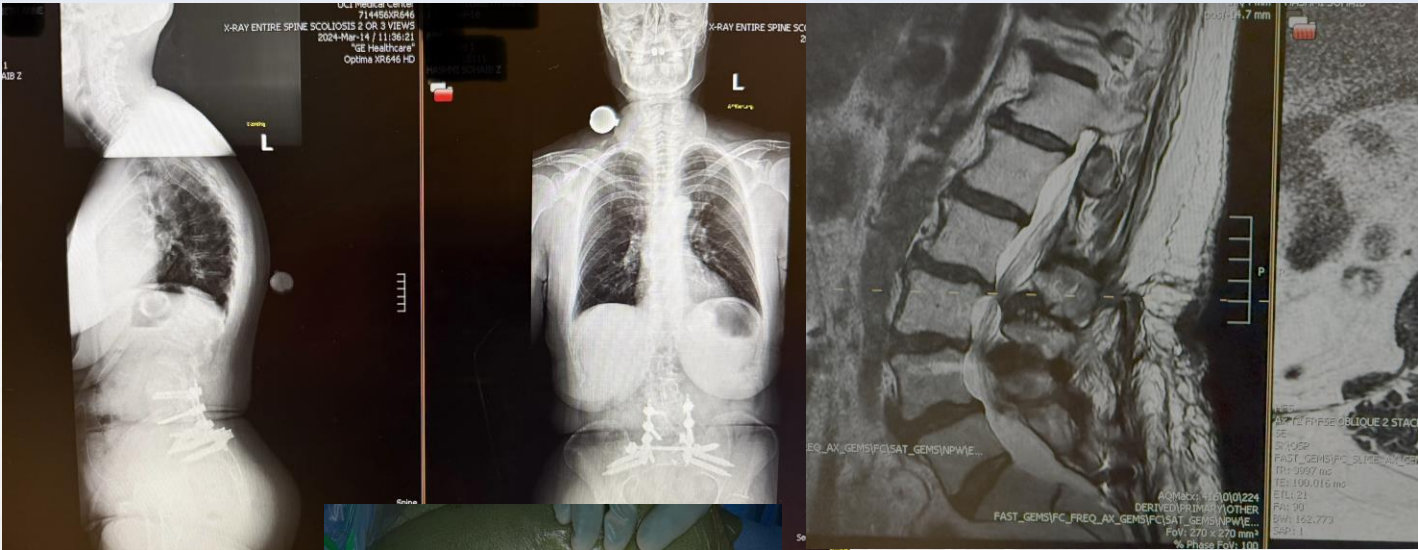
- Technical skills (except control of bleeding...)

Indications:

- Microdiscectomy (35)
- Laminotomy/foraminotomy (30)
- Interlaminar decompression (30)
- Multilevel decompression (15)
- Fusion (1)



Patient experience



Systematic Review/Meta-Analysis

What is the learning curve for endoscopic spine surgery? A comprehensive systematic review

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- Overall median number of cases to reach the learning curve threshold was significantly less in uniportal vs biportal studies (20 vs. 37.5, $p=.0463$).
- Operative time for biportal discectomies decreased by a significantly greater amount vs uniportal. (44.5% vs. 21.4%, $p=.0332$).

Early practice takeaways

Buy in/ commitment : surgeon, patient, staff, hospital ,
industry partners

Mentorship

Indications

Pre/post conferences

Self-assessment: technical progression, patient outcomes

Thank You

