

2025 Annual Meeting Punta Mita, Mexico

Scientific Program Highlights

Spine Section

Editor: Ben Elder

- **Jamal McClendon** presented a retrospective review of 904 pediatric spinal deformity patients, and find screening for MSSA/MRSA minimized infection rate and return to surgery.
- **Devin Amin** compared the use of O-arm based navigation for placement of ACDF plates, and found less lateral plate deviation but a longer operative time with navigation.
- Andres Pascual-Leone used the QOD registry to study 608 patients with grade 1 spondylolisthesis, and found a greater attainment of MCID for pain and function following MIS surgery for obese patients, but no differences for non-obese patients.
- **Richard Fessler** presented data from the ISSG, and found a greater number of patients employed at 1 yr following MIS vs open deformity surgery, but no differences at 6 months and 2 years.
- **Neil Malhotra** presented on his exciting work with a Spine Oncology rapid imaging protocol and imaging score to minimize ED visits and improve treatment efficiency.
- Gabe Smith reported on his experience with a center of excellence program for spine surgery, offering bundled payments with a significant cost savings.
- **Allan Villavicencio** reported on the LimiFlex study, and found safety and comparable to improved outcomes using a tether stabilization device compared to traditional TLIF for lumbar stenosis with grade 1 spondylolisthesis.
- **Chris Holland** demonstrated the safety and cost-efectiveness of performing ACDF, posterior cervical fusion, lumbar decompression, and MIS-TLIF in a freestanding ASC.
- **Mena Kerolus** reported a series of 243 adult spinal deformity patients, and 18% remained coronally malaligned postoperatively, with increased postoperative complications.
- **Khoi Than** reported a series of 5 patients undergoing salvage pelvic fixation/SI joint fusion using a robot-assisted technique following prior failure through an MIS approach.
- **Diana Wiseman** presented a quality improvement initiative using a nine-factor sociomedical checklist to try and improve length of stay.
- **Ben Elder** reported a series of 102 patients undergoing GLP-1 agonist therapy for weight loss, with a significant decrease in spine bone density based on GLP-1 agonist treatment duration.
- Kai-ming Fu studied the effects of gender on patient-reported outcomes followed surgery for grade 2 spondylolisthesis, and no significant effects were identified at 2 years, whereas an association between female gender and satisfaction was identified in a prior grade 1 spondylolisthesis cohort.
- **Miles Hudson** studied the effects of incorporating augmented reality for spinal decompression, and found that it was particularly beneficial for the resident cohort.
- **Srinivas Prasad** performed a systematic review and meta-analysis, and found that vertebral cement augmentation at the UIV resulted in a lower risk of junctional failure requiring surgical revision.
- **Josh Bakhsheshian** described a novel transforaminal endoscopic decompression at L5-S1, with successful outcomes in a series of 8 patients.
- Andrew Chan reported 5 year results from the QOD registry comparing MIS and open TLIF, with lower reoperation rates and higher patient satisfaction in the MIS cohort.
- Louis Kolb used the National Inpatient Sample database and found significant effects of obesity on postoperative outcomes following ACDF and posterior cervical fusion, along with greater healthcare resource utilization in the obese population.