resulted in additional intravenous fentanyl usage. The mean of time from initiation of anesthesia to completion of surgical preparation was 23.3 ± 4.7 min in the ESPB group, which was shorter than 32.3 ± 10.8 min in the GA (p value = 0.001) or 33.3 ± 6.7 min in the SA group ($p < 0.001$). The proportion of patients requiring first rescue analgesia within 30 min was 30% in the ESPB group, which was lower than 85% in the GA ($p < 0.001$), but no significant different with 10% in the SA ($p = 0.11$). The mean of total hospital days in the ESPB was 3.0 ± 0.8, shorter than 3.7 ± 1.8 in the GA ($p = 0.02$) or 3.8 ± 1.1 in the SA group ($p = 0.01$). There was no case of postoperative nausea and vomiting in the ESBB even without prophylactic antiemesis. **Conclusion:** ESPB with sedation is a viable anesthetic option for UBE lumbar decompression.

OP02: Lumbar Degenerative: The Role of MISS Techniques in Lumbar Degenerative Pathology

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A010: Surgical technique preference profile of direct decompression techniques among AO Spine members for lumbar degenerative spondylolisthesis. Insights from AO Spine KF Degen Spondylolisthesis Survey

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Introduction: Lumbar degenerative spondylolisthesis is a common condition addressed by spine surgeons across the globe. Compared to the open laminectomy, evolution in the minimally invasive (MIS) decompression surgery techniques using endoscopes and tubular/bladed retractors has changed the practice pattern for decompression for degenerative spondylolisthesis among surgeons. This study analyzes the utilization rate of open versus MIS techniques among the AO spine members for direct decompression of lumbar degenerative spondylolisthesis. **Methods:** Utilizing an electronic survey, AO Spine international members were presented with a case of L4-L5 grade I degenerative spondylolisthesis and queried about their treatment choices for decompression and their decision to offer fusion. Data collected included age, region of practice, training background, years of experience, practice setting, case volume, and treatment decisions. Comparative analysis of the responder characteristics was performed using Pearson's chi-squared test. **Results:** A total of 479 responses were collected, and 54% of surgeons opted for the direct decompression method in their management, while the rest chose indirect decompression resulting from instrumentation and fusion. We noted a comparable distribution of the responder demographics across age, region of practice, training background, years of experience, practice setting, and case volume. Of 258 responders who opted for direct decompression, only 7% chose endoscopic decompression, 33% chose MIS decompression using tubular/bladed retractors, and 60% chose open decompression. We noted a significant association between female surgeons opting for open decompression techniques ($p < 0.05$). However, we did not find any other significant relationship between the other responder characteristics analyzed that determined surgeon's preference of direct decompression technique. We also noted that the choice of decompression technique significantly affected surgeon decision to fuse following decompression ($p < 0.01$). Only 26% of those who chose endoscopic decompression opted for fusion for the given case. In comparison, 73% and 95% of those who decided decompression with MIS techniques and open decompression opted to fuse following decompression ($p < 0.01$). **Conclusion:** MIS endoscopic techniques are not widely used as the decompression method of choice for L4-L5 degenerative spondylolisthesis, and open decompression through laminectomy remains the most common technique for direct decompression among spine surgeons. However, surgeons who opt for endoscopic decompression are less likely to fuse than surgeons who perform other decompression techniques. Hence, further studies are need to clarify which type of decompression is the most appropriate for particular situation in patients with degenerative spondylolisthesis.

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A011: Can robotic pedicle screw placement reduce perioperative complications requiring re-operation and invasiveness? Analysis of 1,633 patients undergoing lumbar fusion utilizing propensity score matching

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