discharged to an inpatient rehab (IPR), and 13 (10.8%, p = 0.016) were admitted to a skilled nursing facility (SNF). **Conclusion:** Our study identified that patients at the non-tertiary care, university-affiliated hospital experienced a significantly shorter hospital length of stay with an increased discharge rate to home compared to patients at the tertiary-care hospital who stayed longer and were more likely to be discharged to a rehab or skilled nursing facility. There were also no discernible differences in readmissions, revision, and complication rates between the two hospitals, indicating that the expedited recovery at a university-affiliated hospital did not compromise surgical quality or postoperative outcomes. These findings suggest that for certain patient populations, university-affiliated hospitals may offer a more efficient, cost-effective model for lumbar spine surgery without sacrificing the quality of patient care compared to tertiary-care hospitals.

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P259: Neurosurgeons prefer minimally invasive surgery versus open procedures in L4-5 spondylolithesis pateints while performing fusion. Results from a surgeon demographic-impact study for L4-5 degenerative spondylolithesis

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Introduction: Over the past 30 years, there has been significant advancement in minimally invasive spinal surgery, driven by both patient demand and technological progress. The aesthetic benefits, along with advantages such as rapid recovery and reduced pain, have made minimally invasive surgery (MIS) a preferred choice for many patients. This study aimed to investigate surgeon preferences for open or MIS in decompression and fusion for the common clinical condition of grade 1 L4-5 spondylolisthesis, based on surgeon demographics. **Material and Methods:** The survey was distributed online to over 6000 AO Spine members between July 27 and September 8, 2023. 943 responded and 479 completed the survey. Questions pertained to decision making parameters and surgical technique preferences in the treatment of three cases of grade 1 L4-5 spondylolisthesis. We then analyzed the preference for MIS versus open procedures among surgeons who chose laminectomy and fusion as treatment for three representative cases. We conducted this analysis based on surgeon demographics, including country of practice, sex, age, years of experience in spine surgery, specialty, practice setting, fellowship training status, and the volume of lumbar spondylolisthesis cases in their practice. All statistical analyses were conducted using the chi-square method. **Results:** In the first case of severe central stenosis minimal instability (1-2mm anterior translation in flexion) in elderly patient, 309 (64.5%) surgeons chose laminectomy and fusion as the preferred treatment. Out of these, 233 individuals (75.4%) opted for the open procedure, while 76 individuals (24.6%) chose MIS. A significantly notable difference in procedure preference was neurosurgeons demonstrating a stronger inclination towards MIS compared to orthopedic surgeons (p = 0.033). For the second case of severe central and foraminal stenosis with severe instability (5mm anterior translation in flexion) in middle-aged patient, 365 individuals (76.2%) opted for laminectomy and fusion as their treatment. Among these, 265 individuals (72.6%) favored the open procedure, while 100 individuals (27.4%) opted for MIS. Again, neurosurgeons showing a greater preference for MIS compared to orthopedic surgeons (p = 0.001). In the third case of no significant stenosis, moderate instability (3mm anterior translation in flexion), and facet arthrosis in middle-aged patient, a total of 207 individuals (43.2%) opted for laminectomy and fusion as their treatment. Among these, 136 individuals (65.7%) chose the open procedure, while 71 individuals (34.3%) opted for MIS. A Significant difference in procedure preference was observed based on sex and age. Female surgeons (p = 0.023) and the 55-64 age group (p = 0.007) exhibited a preference for the open procedure compared to other age groups and male surgeons. **Conclusion:** There was a trend for neurosurgeons to prefer MIS over orthopedic surgeons in the case of elderly patient with severe stenosis and middle-aged patient with severe instability and stenosis. However, in middle-aged patient with moderate instability and no significant stenosis, there was a tendency for female surgeons and those aged 55-64 to prefer the open procedure.

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P260: Fusion preference-profile among AO Spine members for degenerative lumbar spondylolisthesis. Insights for AO Spine KF Degen Spondylolisthesis Survey

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Introduction: Surgical approaches when clinically required for lumbar degenerative spondylolisthesis in the real world is not consistent with randomized controlled trials and big data registries that indicate the superiority of decompression over fusion in controlled setting. This study analyzes the fusion preference-profile among the AO spine members to a given case of lumbar degenerative spondylolisthesis. **Methods:** A survey was distributed online to over 6000 AO Spine members between July 27 – September 8, 2023. Surgeons were presented a case of L4-L5 grade I degenerative spondylolisthesis in a middle aged individual with significant back and leg pain with neurological deficits with radiological dynamic translation without canal stenosis. The participants were queried about their treatment choices for decompression and their decision to offer fusion. Data that may impact that decision were collected that include age, region of practice, training background, years of experience, practice setting, case volume, and their final treatment decisions. Comparative analysis of the responder characteristics was performed using Pearson's chi-squared test. **Results:** A total of 943 surgeons responded and 479 completed the survey. We noted a comparable distribution of the responder demographics across age, region of practice, training background, years of experience, practice setting, and case volume. 91% of surgeons opted for fusion in their management, while 9% chose direct decompression alone. Of 429 responders those who opted for fusion procedure, 56% surgeons employed direct decompression techniques while 44% chose indirect decompression resulting from instrumentation. We noted that surgeons with fellowship training ($p < 0.05$) and higher case load surgeons ($p < 0.05$) had significantly higher inclination towards fusion. **Conclusion:** Fusion is commonly employed in the treatment decision combined with decompression in the management of degenerative spondylolisthesis. Surgeons choice of fusion in this setting needs to be systematically studied, as there is a disconnect with the available data from the randomized clinical trials in the field.

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P261: Posterior lumber-interbody fusion for the treatment of spondylolisthesis

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Background: The posterior lumbar interbody fusion (PLIF) procedure allows restoration of the weight-bearing capacity to a more physiological ventral position and maintenance of disc space height. However, the procedure can be technically difficult and may cause complications. It has always been performed bilaterally; central fusion has not been commonly used. **Methods:** Forty-eight patients who met the interbody fusion criteria from March 2013 to July 2023 were included in the study. Surgery was performed from the posterior with chips of bone graft for interbody fusion supplemented with transpedicular screws and rod. The follow-up period from 8 to 30 months with a mean of 14.4 months. It was a prospective study irrespective of age & sex. **Results:** Overall, 92.86% of the patients were satisfied after surgery. Radiography study showed the rate of bony fusion being 82.14%. Fibrous union was noted in two patients. One patient experienced tear of the dura without clinical sequel. One patient had misdisplacement of screws in disc space. Overall, the complications were negligible and none of the patients sustained a motor deficit and permanent complication. **Conclusions:** The PLIF procedure using central bone graft combined with bilateral pedicle screws fixation obtained satisfactory outcome within a short-term or long-term follow-up period. Since the implant-related complications have seldom been observed, it may be used as an alternative option for recurrent lumbar disc herniation or low-grade spondylolisthesis with apparent degenerative disc disease.

Keywords: posterior lumbar interbody fusion, bilateral pedicle screw

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P262: Deroofing and medial facetectomy one of the treatment modality for multilevel degenerative lumbar spinal canal stenosis

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Background: Conventional laminectomy is a simple procedure that provides adequate decompression in case of lumbar spinal canal stenosis. However, with this surgical modality,