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Podium & Two-Minute Point Presentation Abstracts

Methods

Inclusion criteria were surgical patients diagnosed with CSM between 2010 and 2012 at institutions represented by the American College of Surgeons database. Patients with fractures, +9 levels fused, or cancers were excluded. Univariate and multivariate linear regression modeling analyses identified independent predictors for LOS and readmission.

Results

3057 CSM cases were identified between 2010-2012. Average age and BMI were 60.7 yrs and 29.2 kg/m², respectively. LOS ranged from 0-62 days. Independent positive predictors of extended LOS (≥4 days) included: age (OR 1.037, p<0.001), diabetes (OR 1.719, p<0.001), ASA class (OR 2.264, p=0.009), and op time (OR 1.008, p<0.001). Of the 979 (31.9%) surgical CSM patients with 30-day readmission data, 915 were not readmitted (93.8%), while 61 (6.2%) were. Independent positive predictors of readmission were diabetes (OR 1.460, p=0.009) and ASA class (OR 2.539, p=0.033). A sub-group analysis of readmitted patients who returned to the OR identified age (OR 0.918, p=0.004) and pulmonary comorbidities (OR 4.584, p=0.038) as significant predictors of major reoperation.

Conclusion

Elderly CSM surgical patients with pre-operative diabetes, higher ASA Class assignment, and increased op time were at risk for extended LOS. These same factors, with the exception of age, significantly predicted hospital readmission within 30 days. Of CSM patients readmitted, presence of pulmonary comorbidities increased reoperation risk, while increased age reduced this risk.

17. MINIMALLY INVASIVE TRANSFORAMINAL LUMBAR INTERBODY FUSION (MIS TLIF): 2 YEAR PROSPECTIVE OUTCOME STUDY IN A TERTIARY CARE HOSPITAL

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Malaysia

Summary

MIS TLIF is a safe and effective technique in our prospective clinical study of 91 patients that achieved good to excellent clinical outcomes above the expectations of the patient. All patients showed significant improvements in their ODI, VAS score, and SF-36 domains at every time point studied that was maintained up to 24 months. Once radiological healing takes place, the patients have a steady uphill course towards improved functional recovery and reduced pain.

Hypothesis

The purpose of this prospective study is to present the clinical outcome and radiological fusion of MIS TLIF over a 24 mth period.

Design

2 year prospective clinical and radiological outcome study of MIS TLIF.

Introduction

MIS TLIF may help reduce the morbidity related to post surgical pain and improve post surgical pain, recovery and early return back to work.

Methods

91 patients underwent MIS TLIF between Aug 2007 to Feb 2012. Serial X-rays and clinical outcomes were performed at 6 wks, 3 mths, 6 mths, 12 mths and 24 mths using VAS, Oswestry Disability Index (ODI) and SF-36. Radiological fusion was assessed at 12 months using a CT-scan.

Results

There were 52 males, 39 females, with 2 year follow up, and mean age 55 yrs. 77 patients underwent single and 14 patients two level surgery. 17 patients (19%) had spondylolisthesis (13 degenerative, 4 lytic), 74 patients (81%) had degenerative disc disease with or without radicular pain. In single versus double level fusion, mean operative time was 98 (80-150) versus 160 mins (140-180), mean blood loss 150 versus 350 mls, and mean hospital stay 2.5 (1-4) versus 2.8 days (1-4). ODI improved significantly (P< 0.05) from pre-operative 51% down to 31.5% at 3 months, 21% at 6 mths and was maintained up till 24 mths. For the same time points, mean VAS back pain score improved significantly from 58% pre-op down to 32%, 29% and maintained at 24 mths at 23%, VAS leg pain improved from 55% down to 22%, 16% and maintained up to 24 mths at 15%. For mean physical (PCS) and mental (MCS) all improved significantly at every time point up till 24 mths. All patients showed either grade 1 or 2 fusion on CT-scan based on the Bridwell grading system. No patients had any radiolucency, collapse or resorption of the graft at 12 months follow up. There was 1 dural tear, 2 misplaced screws requiring repositioning, 1 pseudarthrosis requiring revision anterior fusion, and 1 bone graft migration treated conservatively.

Conclusion

MIS TLIF is a safe and effective technique that achieves good to excellent clinical outcomes above the expectations of the patient in the early post-operative period up to 24 mths.

18. USE OF PEEK CAGES IN THE TREATMENT OF BASILAR INVAGINATION BY ATLANTOAXIAL FACET DISTRACTION (GOEL TECHNIQUE)

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Brazil

Summary

Traditional treatment of basilar invagination is transoral odontoid resection and occipitocervical fusion. The Goel technique has modified the way of management, avoiding the morbidity of transoral approach. We believe that the use of peek cage provides additional benefits compared to original Goel technique.