

### CO-ORGANIZED EVENT

# 2<sup>nd</sup> International Conference on **Spine and Spinal Disorders**

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## Hybrid spinal fixation minimally invasive approach in lumbar degenerative listhesis – our experience and outcome

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Background: Treatment of degenerative lumbar disc disease and instability is still a controversial area though surgical treatment is preferred when all non-operative modalities fail. Spinal stabilization and fusion has been the gold standard procedure for instability. To achieve optimal fusion adequate stabilization is also essential. To achieve this there are variety of methods available in the literature.

Materials and methods: It is a retrospective analysis of the hospital records of 16 adult patients diagnosed to have had symptomatic degenerative disc disease with lumbar spinal stenosis and instability, who had undergone ipsilateral pedicle screw (PS) with contralateral translaminar facetal screw (TLFS) fixation with fusion were included in this study from 2013 Jan to 2016 January. Patients with pars defect, high grade listhesis, primary bony stenosis were excluded from the study. All patients underwent ipsilateral PS fixation and decompression with contralateral TLFS and fusion either in the form of posterolateral or interbody cage or both along with local (laminotomy) bone grafts.

Results: The mean age at the time of the index procedure was about 52 years with 11 female and 5 male patients. L4,5 vertebral level was found to be the most common site for degenerative listhesis in our series (14 patients). The average preoperative NRS for LBP, leg pain was 6,7 respectively which had improved to 2 at 24 months. The average preoperative ODI was 68% which improved to 19% at 24 months. Average operative time was 134 minutes with a range of 120 to 200 minutes. Average blood loss was 213ml with a range from 110 to 260ml. The overall cost of the implants was 40% lower than the conventional use of 4 pedicle screws. Postop recovery was very brisk as the one side of the spine was not disturbed. Out of 16 patients, 14 had fusion (87%) and two had delayed fusion whose status was not known as the follow up was lost at 1 year.

Conclusion: Hybrid fixation in degenerative listhesis with lumbar spinal stenosis is a minimally invasive, soft tissue preserving viable option with excellent outcomes.

#### **Biography**

Chandrasekaran Marimuthu has pursued MBBS MS Orthop	edics. He Specializes in Orthopedic	Surgery, Sports Medicine, and	Fraumatology:
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