

Complication of migrated interspinous spacer causing spinal canal stenosis

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INTRODUCTION:

With the increasingly elderly patient population, the prevalence of degenerative spinal diseases is also rising steadily. In lumbar spinal stenosis, the dural sac and nerve roots are often compressed by one or a combination of bulging intervertebral discs, facet joint hypertrophy and ligamentum flavum hypertrophy.

Many individuals are symptomatic with pain and neurogenic claudication, and may present with muscular weakness, sensory changes and impeded mobility. In the case of lumbar spinal stenosis, for those refractory to conservative or medical therapy, the traditional surgical approach has been bony decompression, such as via a laminectomy using an open or minimally invasive access. Since its introduction over 50 years ago by Knowles, interspinous process devices (IPD) or spacers have been designed and tested in various studies as an alternative or adjunct option to traditional decompression surgery.

REPORT:

51 year old gentleman, with underlying diabetes mellitus and hypertension. Patient had back pain since 2001, and was diagnosed since then. Initially patient was on physiotherapy, however his symptoms worsened and subsequently proceed with L4/L5 decompression, discectomy, neurolysis with interspinous spacer L4/L5 on 2014.

On 2021 patient started to have recurrent backpain and radiculopathy. The shooting pain was more on right lower limb. Proceed with MRI, however limited assessment can be done due to previous spacer. CT lumbosacral done instead. Apparent displacement of the L4/L5 interspinous spacer, abutting the thecal sac posteriorly. Removal of interspinous spacer with transforaminal lumbar interbody fusion done over L4/L5 and L5/S1, intraoperatively noted that dura mater layer severely thin out.

Figure 1: CT lumbosacral showing migrated interspinous spacer into canal



Figure 2: Saggital view MRI showing migrated interspinous spacer compressing dura



CONCLUSION:

Current evidence indicates no superiority for mid- to long- term patient-reported outcomes for IPD compared with traditional bony decompression, with lesser surgical complications but at the risk of significantly higher reoperation rates and costs. The role of IPD as standalone or adjunct devices for lumbar spinal stenosis surgery needs to be scrutinized, with careful consideration of the risks, benefits and costs before implantation

REFERENCES:

Phan K, Rao PJ et al, j spine surgery, 2016,march.