

Retrospective [case series](#) evaluated the clinical and radiographic [outcomes](#) of a new minimally invasive procedure to treat [Lumbar spinal stenosis](#) (LSS): pedicle-lengthening osteotomy using the ALTUM system ([Innovative Surgical Designs](#), Inc., Bloomington, Indiana, [United States](#)). Peri- and postoperative demographic and radiographic data were collected from a clinical series of seven patients with moderate LSS who were > 60 years of age. Clinical outcome was evaluated using visual analog scale (VAS) scores and the spinal canal area on computed tomography scans.

Twelve months after the procedure, scoring revealed a median improvement of 3.7 on the VAS for the back and 6.3 on the VAS for the leg, compared with the preoperative baseline ( $p < 0.05$ ). The postoperative central area of the lumbar canal was significantly increased, by 0.39 cm<sup>2</sup>; the right and left neural foramina were enlarged by 0.29 cm<sup>2</sup> and 0.47 cm<sup>2</sup>, respectively ( $p < 0.05$ ).

In this preliminary study, the ALTUM system showed a good clinical and radiologic outcome 1 year after surgery. In an older or high-risk population, a short minimally invasive procedure may be beneficial for treating LSS <sup>1)</sup>.

<sup>1)</sup>

Maugeri R, Basile L, Gulì C, Banco A, Giordano G, Giugno A, Graziano F, Giammalva RG, Iacopino DG. Percutaneous Pedicle-Lengthening Osteotomy in Minimal Invasive Spinal Surgery to Treat Degenerative Lumbar Spinal Stenosis: A Single-Center Preliminary Experience. *J Neurol Surg A Cent Eur Neurosurg*. 2018 Jun 14. doi: 10.1055/s-0038-1641148. [Epub ahead of print] PubMed PMID: 29902827.

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