Altum

http://www.innovativesurgicaldesigns.com/altum/

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 cm2; the right and left neural foramina were enlarged by 0.29 cm2 and 0.47 cm2, 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 [1)].

1)
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.