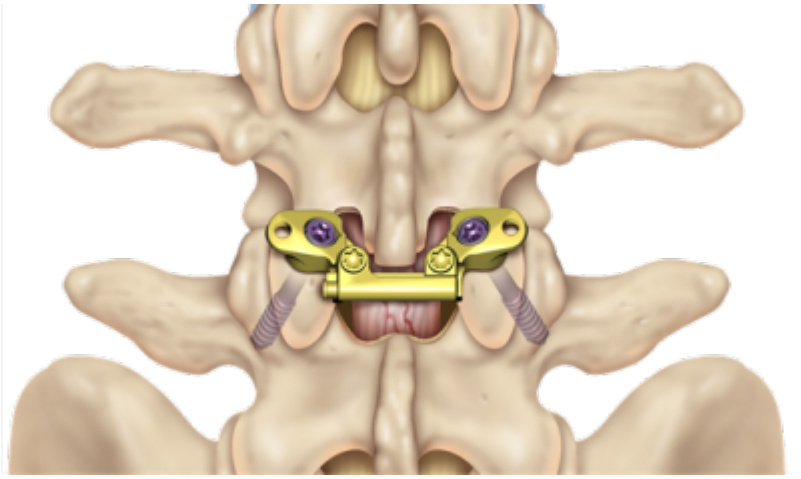
Facet-Link



Facet-Link, Inc., Rockaway, New Jersey, United States.

http://www.linkspine.com/

FacetLINK matches the biomechanical performance of bilateral pedicle screws and rods [1)], but can be placed through a much smaller exposure offering the possibility of reduced collateral tissue damage.

From a biomechanical point of view, facet screw fixation seems to provide equal stiffness during flexion-extension movements and lesser stiffness in axial rotation and lateral bending compared with pedicle screw fixation. However, the addition of the central cross-link in the Facet-Link System should theoretically increase the resistance to axial torque and ensure similar biomechanical features of the pedicle screw systems.

Video

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<iframe src="https://player.vimeo.com/video/105186986?color=ffffff&title=0&byline=0&portrait=0" style="position:absolute;top:0;left:0;width:100%;height:100%;" frameborder="0" webkitallowfullscreen mozallowfullscreen allowfullscreen></iframe>

<script src="https://player.vimeo.com/api/player.js"></script> Facetlink Mini & Hemi - HD from Ghost Productions on Vimeo. </html>

Trungu et al., from Rome and, Tricase, Italy reported a total of 25 patients between May 2015 and June 2016 affected by radiologically demonstrated one-level Lumbar spinal stenosis (LSS) with facet joint degeneration and grade I spondylolisthesis in a prospective study. All the patients underwent

laminectomy, foraminotomy, and one-level facet fixation (Facet-Link, Inc., Rockaway, New Jersey, United States). Pre- and postoperative clinical (Oswestry Disability Index [ODI], Short Form 36 [SF-36]) and radiologic (radiographs, magnetic resonance imaging, computed tomography) data were collected and analyzed.

Mean follow-up was 12 months. The L4-L5 level was involved in 18 patients (72%) and L5-S1 in 7 patients (28%); the average operative time was 80 minutes (range: 65-148 minutes), and the mean blood loss was 160 mL (range: 90-200 mL). ODI and SF-36 showed a statistically significant ($p < 0.05$) improvement at last follow-up.

Lumbar transfacet screw fixation is a safe and effective treatment option in patients with single-level LSS, facet joint degeneration, and mild instability [2].

1)
Crawford et al, International Society for the Advancement of Spine Surgery, Miami, FL, 2014
2)
Trungu S, Pietrantonio A, Forcato S, Tropeano MP, Martino L, Raco A. Transfacet Screw Fixation for the Treatment of Lumbar Spinal Stenosis with Mild Instability: A Preliminary Study. J Neurol Surg A Cent Eur Neurosurg. 2018 Jul 16. doi: 10.1055/s-0038-1655760. [Epub ahead of print] PubMed PMID: 30011420.