

Lumbar degenerative disc disease treatment

For those that fail conservative measures, surgical options include [lumbar discectomy](#), [lumbar fusion](#) procedures, and [disc replacement](#). [Lumbar disc replacement](#) (LDR) or [lumbar arthroplasty](#) involves removal of the diseased [lumbar disc](#) and replacement with an artificial mechanical one developed with hopes to avoid undesirable consequences of fusion such as immobility and increased risk of [adjacent segment degeneration](#).

Related to the development and diffusion of [ALIF](#) and [XLIF](#), it is possible to correct [sagittal malalignment](#) in selected cases of [lumbar degenerative discopathy](#) with relatively low invasiveness. Still, the [malposition](#) or the inappropriate size of the implanted [cages](#) may lead to the [subsidence](#) of the [vertebral endplates](#) with loss of [correction](#) as well as a decrease in the potential to restore [spinal biomechanics](#) in the long run. The aim of a study of Tartara et al. was to evaluate the [safety](#), [feasibility](#), and preliminary clinical and radiological results when using [custom-made](#), [trabecular titanium cages](#) in [ALIF](#) and [XLIF](#) procedures.

They [prospectively](#) evaluated 18 consecutive [patients](#) who underwent either an ALIF or an XLIF procedure with the implant of a custom-made, trabecular titanium cage for [lumbar degenerative disease](#) with [sagittal imbalance](#), with a minimum of 1-year clinical and radiological follow-up.

After a mean follow-up of 14 months, the [Oswestry](#) score dropped to a mean of 13 from a preoperative value of 48 ($p < 0.0001$). [Lumbar lordosis](#) was significantly improved, especially in the lower lumbar segment L4-S1 ($+ 11 \pm 7^\circ$; $p < 0.0001$). No cases of subsidence were noted.

Custom-made, trabecular titanium cages allowed a segmental, steady, durable sagittal correction via ALIF and XLIF approaches. The absence of cage subsidence at 1 year encourages further studies on a larger cohort with longer follow-up ¹⁾.

¹⁾

Tartara F, Bongetta D, Pilloni G, Colombo EV, Giombelli E. Custom-made trabecular titanium implants for the treatment of lumbar degenerative discopathy via ALIF/XLIF techniques: rationale for use and preliminary results. Eur Spine J. 2019 Nov 6. doi: 10.1007/s00586-019-06191-y. [Epub ahead of print] PubMed PMID: 31696335.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

https://neurosurgerywiki.com/wiki/doku.php?id=lumbar_degenerative_disc_disease_treatment

Last update: **2024/06/07 02:53**

