Lumbar expandable titanium cage

TLIF with expandable cages was performed in 54 patients (62 levels) over a 24-month-period using open midline or minimally invasive surgery techniques with placement of Globus Caliber, Rise, or Altera expandable cages. All patients underwent clinical and radiological assessment at 6 weeks, 6 months, 1, and 2 years postoperatively. Clinical outcome was measured by Oswestry disability index (ODI), visual analog pain score for both back and leg (visual analog scores [VASs]). Radiological assessment was done by X-ray standing lateral position.

Results: There were significant clinical improvements in ODI, VAS leg, and VAS back at all postoperative time points. Disc height, foraminal height, focal Cobb angle, and global Cobb angle were significantly increased and maintained at all time points for 24 months ($P < 0.001$). Dural tear occurred in one patient (1.9%). There were neither intra- or postoperative neurological complications nor cage subsidence nor migration.

These preliminary results indicate that the use of an expandable interbody cage achieves good clinical outcomes by improving and maintaining foraminal dimensions and disc height with minimal complication rate [1)]

1)
Boktor JG, Pockett RD, Verghese N. The expandable transforaminal lumbar interbody fusion - Two years follow-up. J Craniovertebr Junction Spine. 2018 Jan-Mar;9(1):50-55. doi: 10.4103/jcvjs.JCVJS_21_18. PMID: 29755237; PMCID: PMC5934965.