CLINICAL STUDY SUMMARY

Transforaminal Lumbar Interbody Fusion with Expandable Interbody Device Provides Indirect Decompression through Significant Disc Height Restoration

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OBJECTIVE: The objective of this study was to quantify the radiographic outcomes of patients who underwent open transforaminal lumbar interbody fusion (O-TLIF) using a RISE® TLIF expandable lumbar interbody spacer.

METHOD: A single site, retrospective, institutional review board-exempt chart review was conducted on 68 consecutive patients who underwent O-TLIF at 1-2 contiguous level(s) using RISE® TLIF expandable lumbar interbody spacers. Radiographic outcomes were collected and compared at preoperative and postoperative timepoints up to 12 months.
Radiographic outcomes demonstrated the following improvements from preop to 12 months postop:

- **3.0 mm INCREASE**
  Mean Posterior Disc Height

- **3.8 mm INCREASE**
  Mean Anterior Disc Height

- **2.9 mm IMPROVED**
  Mean Neuroforaminal Height

- The average disc height increased 49% postoperatively, and was maintained without significant loss over 12 months.

- A pelvic incidence minus lumbar lordosis (PI-LL) of greater than 10° has been shown to be a predictor of severe disability*. In this study, mean PI-LL was 8.1° at 12 months (P=0.035).

- There were no reported implant-related complications or subsidence at 12 months.

**CONCLUSION:** In the studied patient population, O-TLIF using RISE® TLIF expandable lumbar interbody spacer restored anterior and posterior disc height, and neuroforaminal height providing evidence of indirect decompression. Segmental and lumbar lordosis was maintained at 12 months.


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