

Significantly lower mechanical complication rate with TRIGEN[◇] INTERTAN[◇] Intertrochanteric Antegrade Nail compared with Proximal Femoral Nail Antirotation (PFNA) for managing reverse intertrochanteric femur fractures

+ Plus points



89.8%

Relative reduction in mechanical complication rate with TRIGEN INTERTAN versus PFNA
($p < 0.0001$)



42.0%

Relative reduction in mean telescoping with TRIGEN INTERTAN versus PFNA
($p = 0.039$)

Overview

- Retrospective, single-centre study comparing clinical and radiological results in 69 consecutive patients who received surgical treatment of reverse intertrochanteric femur fractures with:
 - TRIGEN INTERTAN (n=36; mean age 57.9 years)
 - PFNA (n=33; mean age 54.6 years; DePuy Synthes, Warsaw, IN, USA)
- Telescoping was measured from radiographs on postoperative day 1 and at final follow-up (minimum of 1 year), defined as the distance along the blade from the lateral border of the nail to the blade end

Results

- TRIGEN INTERTAN demonstrated a significantly lower rate of mechanical complications compared with PFNA ($p < 0.0001$; Figure)
 - The incidence of second surgery due to mechanical failure was lower with TRIGEN INTERTAN compared with PFNA (2.8 vs 24.2%)
- Mean telescoping was lower with TRIGEN INTERTAN compared with PFNA (4.18 vs 7.21mm; $p = 0.039$)
- Harris Hip Score recorded at 1 year was similar in both groups

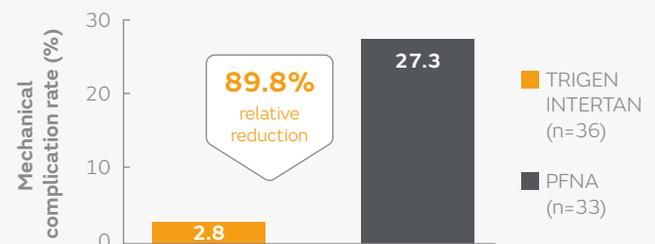


Figure. Rate of mechanical complications by surgical treatment type

Conclusions

TRIGEN INTERTAN showed significantly lower mechanical complication rates in the fixation of reverse intertrochanteric femur fractures compared with PFNA. The authors suggested that the greater tendency for mechanical failure with PFNA compared with TRIGEN INTERTAN may be due to greater lateral migration.

Citation

*Imerci A, Aydogan NH, Tosun K. A comparison of the InterTan nail and proximal femoral nail antirotation in the treatment of reverse intertrochanteric femoral fractures. *Acta Orthop Belg*. 2018;84(2):123–131.

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