

INTERTAN[®] results in significantly less pain upon mobilisation than a sliding hip screw device in patients with intertrochanteric or subtrochanteric fractures

Both devices had favourable functional outcomes and complication rates up to a year after surgery



Study design

- A prospective, randomised, multicentre study of patients with an intertrochanteric or subtrochanteric fracture who received either INTERTAN integrated compression screws (341 patients) or a sliding hip screw (343 patients), with or without trochanteric stabilising plate
- Elderly patients >60 years (mean age, 84.1 years in both groups) were followed for up to one year



Key results

- Patients treated with INTERTAN had significantly less pain at the time of early postoperative mobilisation (Figure)
 - Pain scores were comparable at additional follow-up points
- Regardless of the fracture and implant type, functional outcomes and surgical complications were similar for the two groups
- The average tip-to-apex distance was shortest with INTERTAN (18 vs 21 mm; $p < 0.001$)

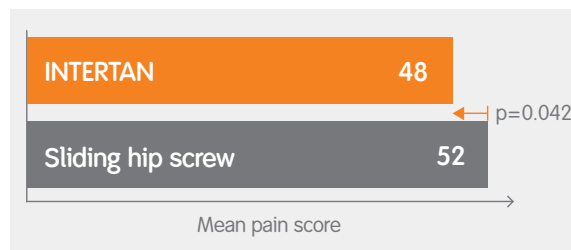


Figure. Mean visual analogue scale pain score at early postoperative mobilisation, with 0 indicating 'no pain' and 100 'unbearable pain'



Conclusion

Compared with a sliding hip screw, INTERTAN resulted in significantly less pain at the time of early postoperative mobilisation in patients with an intertrochanteric or subtrochanteric fracture. Pain scores were comparable at the later follow-up points. Functional outcomes and complication rates were comparable between the treatments at up to one year after surgery.



Considerations

- There were significantly more cognitively impaired patients (31 vs 21%, $p = 0.002$) and more living in nursing homes (94 vs 62 patients; $p = 0.02$) among those treated with INTERTAN; this potentially confounds clinical assessment, as there are noted difficulties in obtaining accurate pain and function tests in such patients



Study citation

*Matre K, Vinje T, Havelin LI, et al. TRIGEN INTERTAN intramedullary nail versus sliding hip screw: a prospective, randomized multicenter study on pain, function, and complications in 684 patients with an intertrochanteric or subtrochanteric fracture and one year of follow-up. *J Bone Joint Surg Am*. 2013;95:200-208.