INTERTAN® results in significantly less limb shortening in treated geriatric hip fractures as compared with a sliding hip screw (SHS)

Results from this randomized, multi-centre trial also indicated that in a subgroup of high-functioning patients, INTERTAN showed trends towards improved functionality compared with SHS at up to one-year follow up

Study design

- A prospective, randomized, multi-centre trial of patients older than 55 years of age with intertrochanteric fractures followed for up to 12 months after receiving either INTERTAN integrated compression screws (123 patients; mean age, 80.6 years) or SHS (126 patients; mean age, 81.0 years)
- A subgroup analysis compared results in patients with a high-functioning preinjury status: 36 receiving SHS and 34 INTERTAN

Key results

- Fewer patients who received INTERTAN had limb shortening of more than 1 or 2 cm, when compared with SHS (Figure 1)
- A higher proportion of patients who received INTERTAN achieved complete union at one year postoperatively than those who received SHS (85.3% vs 69.4%; p < 0.05)
- In the subgroup of high-functioning patients, INTERTAN showed trends towards improved locomotor performance over SHS (Figure 2)

Conclusion

Results from this randomized, controlled trial indicate that treatment with INTERTAN led to significantly higher percentage of patients who achieved complete union at 1 year and a lower percentage of limb shortening, when compared with SHS. The significant discrepancy in shortening of > 2 cm in favor of INTERTAN was considered noteworthy by the authors, as shortening of > 2 cm is known to adversely affect locomotor function in otherwise active individuals. There was also a trend towards improved locomotor performance for the INTERTAN group in the high-function subgroup.

Study citation