

Do Geriatric Hip Fractures Need Follow-up Past 3 Months? A 10-Year Retrospective Review

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Purpose: Average cost for hip fracture care has been estimated to be \$25,000 to \$30,000 for the initial patient event. The majority of cost occurs during the first 3 months following discharge. Major complications and mortality occur in this same time frame. The goal of this study was to determine the utility of following these patients beyond 3 months by examining the radiographic and clinical events.

Methods: Over 10 years, all consecutive patients over age 50 years with an intertrochanteric (IT) hip fracture treated with a cephalomedullary nail (CMN) or sliding hip screw (SHS) were analyzed. Postoperative visits and radiographs were examined. Radiographic indices included femoral neck-shaft angle, tip-apex distance, and femoral neck screw telescoping/backing out. Postoperative complications and healing were assessed at each visit. Union was defined as fracture site bridging on 3 out of 4 cortices as seen on AP and lateral radiographs.

Results: 291 patients were treated (43.3% male, 56.7% female; average age, 74.9 years). 224 of these patients returned for follow-up (77.0%) with an average final follow-up time of 6.7 months. 183 patients achieved union (81.7%). Average time to union was 64.5 days with a standard deviation of 31.1 days. The average intervals for significant complications to occur all fell within 3 months. The average time to death was 54.9 days (12 patients), the average time to infection requiring reoperation was 18.8 days (4 patients), and the average time of hardware failure was 32.3 days (4 patients). Initial radiographic indices included an average neck-shaft angle of 137°, tip-apex distance of 22.5 mm, and telescoping/backing out of the femoral neck screw of 11.7 mm. The neck-shaft angle and tip-apex distance had no significant change across all time points. The screw telescoping averaged 17.0 mm at 6-week follow-up and 18.6 mm at 3-month follow-up, after which no significant changes occurred.

Conclusion: IT hip fractures in the elderly treated with a CMN or SHS did not demonstrate any significant radiographic changes or complications beyond the first 90 days. Further research is warranted into the potential cost-benefit ramifications of limiting hip fracture follow-up to 3 months. This would presumably cut costs by eliminating the need for additional transportation, unnecessary appointments, and radiographic studies beyond the critical time period of 90 days.