

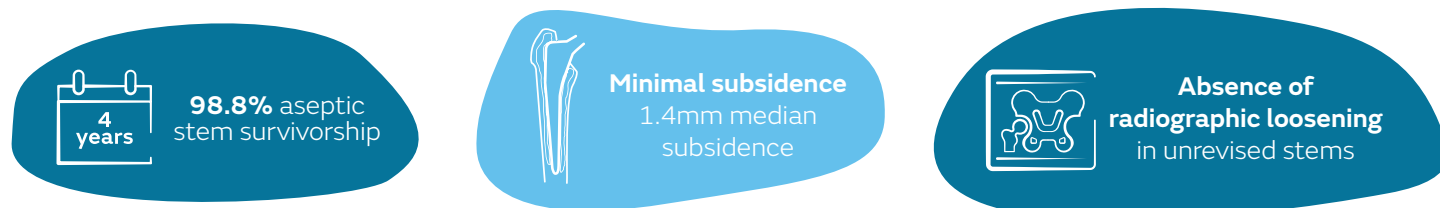
REDAPT[®] Femoral System demonstrates encouraging outcomes in total hip arthroplasty (THA) patients with severe femoral bone loss

Passano B, Oakley CT, Lutes WB, Incavo SJ, Park KJ, Schwarzkopf R. Clinical and radiographic outcomes of a monoblock fluted titanium-tapered stem for Paprosky IIIa, IIIb, and IV femoral bone defects. *J Arthroplasty*. 2023;38(7):1342-1348.

Available at: [The Journal of Arthroplasty](#)  

Key points

When used in THA patients with severe femoral bone loss, REDAPT Femoral System demonstrated:



Overview

- Retrospective, observational study of patients who underwent complex femoral reconstructions with the REDAPT stem
- Overall, 81 patients with femoral Paprosky bone classification defects of type IIIa (82.7%), IIIb (13.6%) and IV (3.7%) were included
 - Of the surgeries, 68 (84.0%) were revision THA and 13 (16%) were conversion THA
- All THA procedures were performed by nine fellowship-trained, high-volume, orthopaedic surgeons at three centres in the US
- Primary outcome was stem survivorship (Kaplan-Meier analysis), and secondary outcomes included subsidence, loosening and all-cause reoperations

Results

- Stem survivorship was high with REDAPT Femoral System (Figure)
 - All-cause survivorship was 95.1% at 2 years and 87.1% at 4 years
 - Aseptic survivorship was 98.8% at 2 and 4 years
- At a median follow-up of 29 months (range, 18-58), median stem subsidence was 1.4mm with REDAPT
 - REDAPT stem subsidence >5mm and >10mm was 23.9% (16/67) and 4.5% (3/67), respectively
- No evidence of loosening in unrevised stems
- Ten (12.3%) patients underwent reoperations
 - Five (6.2%) patients required stem removal; four due to periprosthetic joint infection, one revised secondary to acetabular revision for periprosthetic acetabular fracture

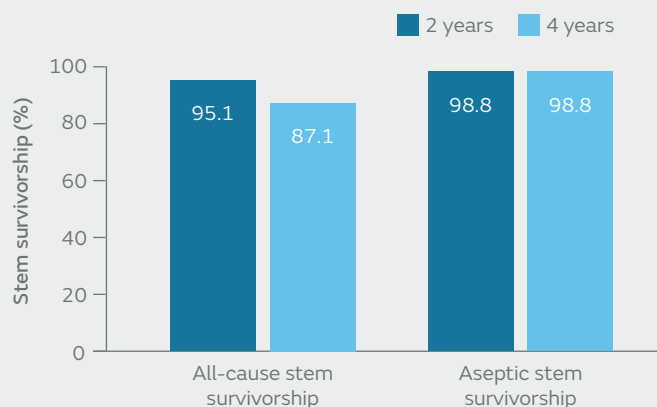


Figure. REDAPT stem survivorship at 2- and 4-years post-THA with REDAPT (Kaplan-Meier analysis)

Conclusions

The REDAPT monoblock stem was associated with high stem survivorship, low subsidence and low dislocation rates, and at short term follow-up (up to 58 months) in complex femoral reconstruction with severe bone loss. The authors noted that the REDAPT stem may be suitable for femoral fixation in patients with proximal femoral bone stock deficiency.

Considerations

Radiographic evidence of loosening was assessed to infer stability and osseointegration; however, these inferences cannot be fully confirmed without more invasive measures.