

POLARSTEM[®] Cemented Hip Stem demonstrates excellent long-term survival

No stem-related failures reported in the 10-year follow-up



Study overview

- Ten year follow-up of the POLARSTEM Cemented Stem following hip replacement performed by three surgeons (October 2007 to December 2009)
 - 113 hip replacements (106 patients; mean age, 74.8 years)
- Harris Hip Scores (HHS) were carried out at follow-up
- Radiographs were carried out perioperatively and at a mean follow-up of 8.9 years



Key results

- Stem survival for all reasons for revision, 96.4% after 10 years (Figure)
- Stem survival for aseptic loosening, 100% after 10 years
- Mean HHS score of 78.7 after 9 years
- In 19 symptomatic patients (20 hips) radiographic follow up did not show migration of the stem
- Four patients required revision:
 - Two patients had all components removed due to infection
 - One patient suffered an intraoperative trochanteric fracture which was treated, but the patient reported never being satisfied so he received a complete revision after 4 years
 - One patient received two revisions of the cup and head due to multiple dislocations. The patient then developed an infection resulting in the removal of all components

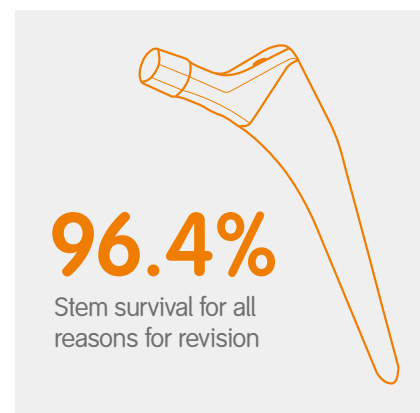


Figure. Stem survival for all reasons for revision



Conclusion

The POLARSTEM Cemented Stem had an excellent long-term survival rate, with no revisions related to stem failure in the studied cohort. POLARSTEM Cemented Stem delivers clinical success comparable to other modern cemented stems.



Considerations

- POLARSTEM Cemented Stem was used in combination with three different acetabular cup types, all with a ceramic-on-polyethylene bearing



Study citation

*Klasan A, Sen A, Dworschak P, et al. Ten-year follow-up of a cemented tapered stem. *Arch Orthop Trauma Surg*. 2018;138:1317-1322. Available at: [Archives of Orthopaedic and Trauma Surgery](#)