

Profemur[®] R

Clinical Data



5- to 10-Year Results Using a Noncemented Modular Revision Stem Without Bone Grafting

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Clinic for Orthopaedic Surgery Lorsch, Germany, Department of Orthopaedic Surgery, University of Göttingen, J Arthroplasty. 2008 Oct;23(7):964-70

Summary

- Retrospective study, 184 consecutive stem revisions with Profemur® R stem, first 73 evaluated.
- Mean follow up: 6,2 years (5-10 years).
- HHS increased from 40 – 75 .
- Complete remodeling of bone defects documented radiographically in 70 % of the cases and partial restoration in the remaining 30 %.
- Progressive subsidence appeared only in 2 stems - 3 re-revisions required, including 1 septic case.
- Survival rate with aseptic loosening as end-point was 96 % over 10 years.

Conclusion

The revision prosthesis examined in this study can be considered a viable and useful option to reconstruct femoral defects in revision hip arthroplasty.

Revision Hip Arthroplasty using a cementless modular tapered stem

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UZ Gent, Belgium. International Orthopaedics (SICOT) 2012 36:35-41

Summary

- Prospective, single series on 68 hip revision arthroplasties performed between June 2002 and May 2006.
- PROFEMUR® modular necks distribution: 35 out of 68 modular necks provided ante-retroversion.
- Mean follow up: 5.2 years (range: 4-7.6).
- 94% of the stems are functioning well at latest follow up and 5 re-revisions were necessary: 1 sepsis, 2 aseptic loosening, 1 loosening and subsidence of the stem, 1 osteosarcoma recurrence.
- The HHS increased from 49.6 pre-op to 75.1 at latest follow-up.
- Intraoperative complications: 22 fissurations, all occurred during removal of the primary prosthesis; 1 wound infection; 1 deep infection; 1 aseptic loosening; 1 subsidence; 2 single dislocations; 1 recurrent dislocation; 1 periprosthetic fracture (caused by trauma six weeks after surgery) and 1 recurrent osteosarcoma.
- The cases of loosening and subsidence were attributed by the authors to the surgeon's learning curve. Those cases were operated before May 2004 and the selected implants were clearly undersized.
- No failures of the modular taper connection were identified.
- Cumulative survival curve of 92.6% at 5 years, with 95.6% survival excluding infections or tumors

Conclusion

The modular cementless diaphyseal fixation stem offers good conditions for bone restoration and seems capable of solving most of the technical problems in cases of extensive bone loss. This is confirmed by the good clinical results found at the final follow-up. Therefore, the authors conclude that the Profemur®R stem provides a good alternative for patients with large femoral defects in the revision setting.

Clinical experience in femoral revision with the modular Profemur® R stem

Stefano Artiacco, Frediano Boggio, Paolo Titolo, Kristjian Zoccola, Pasquale Bianchi, Franco Bellomo. Hip Int. 2011; 21 (01): 039-042

Summary

- Retrospective study, Profemur®R stem used in 35 cases (31 revisions, 4 re-revisions), 31 cases included in evaluation.
- Mean follow up: 56 months (range 30-84).
- Merle d'Aubigné - Postel scores: very good (11), good (9), medium (5), fair (4), poor (4).
- Complications included 2 diaphyseal fractures and 2 early infections.
- Radiographic analysis showed subsidence in 6 cases (3 major > 2cm, 3 without clinical symptoms) due to undersizing of the stem.
- Thigh pain reported in 6 cases.
- No dislocations reported, related to the use of proximal modular components.
- Survival rate at 84 months was 96,6 %.

Conclusion

The authors conclude that the revision with an uncemented, modular femoral stem allows them to achieve a stable and well fixed hip implant. The Profemur®R stem has been an effective implant for femoral reconstruction in cases of loosening with Paprosky grade 3 bone loss and periprosthetic femoral fractures.

Short-term results of modular extensively porous-coated revision stem in revision total hip arthroplasty

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Acta Academiae Medicinae Sinicae 2004 Apr;26(2):182-7

Summary

- Retrospective study, Profemur®R stem used in 12 revision THA.
- Mean Follow up 13,5 months (range 6 – 24 months).
- 6 cases with LLD > 2cm prior to the revision surgery restored to < 1cm postoperatively.
- Full restoration of offset, version and neck-shaft angle.
- Post-op: full pain relief in all cases full weight bearing in 3 – 5 months.
- Bone in-growth shown in 11 cases, 1 solid fibrous fixation only.
- HHS improved from 25 to 72
- Reported complications consisted of femoral shaft fracture in 3 cases.
- No infections or dislocations

Conclusion

Satisfactory results of short-term radiographic and clinical follow up is achieved using modular fully porous-coated stems for revision THA.