

Select Femoral Revisions Without an ETO Demonstrated Excellent Long-Term Survivorship in Over 600 Revision THAs

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INTRODUCTION:

Modern implants, instruments, and techniques afford femoral component revision without the utilization of an ETO in a subset of patients. The aim of this study was to evaluate the survivorship free of any revision and reoperation, radiographic results, complications, and clinical outcomes associated with femoral revisions performed without the use of an ETO.

METHODS:

We retrospectively identified 624 revision THAs where the femoral component was revised without an ETO from 2005 to 2021 using our institutional total joint registry. The mean age was 68 years, 47% were female, and the mean BMI was 30 kg/m². Indication for revision THAs included aseptic loosening (61%; 74% femoral component only, 17% both components, and 9% acetabular component only), PJI (25%), ALTR (5%), dislocation (4%), and other (5%). Revisions, reoperations, stem subsidence, intraoperative fractures, and clinical outcomes were studied. Mean follow-up was 5 years.

RESULTS:

The 10-year survivorships free of revision for aseptic loosening of the femoral component, free of any revision, and free of any reoperation were 99%, 86%, and 80%, respectively. The leading causes of re-revision were dislocation (47%) and PJI (17%, half occurred in patients with prior PJI). Mean stem subsidence was 0.7 mm (range, 0 – 30 mm) with 3.7% of stems subsiding greater than 5 mm. There were 69 intraoperative fractures (11%), with most during final stem insertion (46%) or during explantation of the femoral component (35%). Harris hip scores improved from a mean of 58 preoperatively to 81 postoperatively ($p < 0.0001$).

DISCUSSION AND CONCLUSION: In this large, single institution study of over 600 revision THAs, we demonstrated excellent 10-year survivorship free of aseptic femoral component loosening of 99% when revised without an ETO. However, it is important to note this was a select group of patients amenable to removal without an ETO. Notably, dislocation remains the leading cause of re-revision.