



Title

**REVISION HIP ARTHROPLASTY WITH POROUS TANTALUM AUGMENTS
AND ACETABULAR SHELLS**

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Purpose/Premise

This scientific exhibit provides a review of the authors' clinical experience with porous tantalum revision acetabular shells and acetabular reconstruction using porous tantalum augments.

Material and Methods

A classification system was devised for use in an algorithm that links Paprosky's description of acetabular defects to the determination of the size and position of the implants. The algorithm was then applied to 114 consecutive acetabular revisions involving the porous tantalum shells and augments. The augments were used in 16 of the cases. Clinical results were measured using HHS, radiographic analysis, and hip center correction.

Outcomes

In a 2- to 4-year follow-up, 86% of the shells showed no radiolucent lines. Of 14 hips with postoperative radiolucencies, seven had cleared by the last follow-up, while one had increased. There were no migrations and no revisions for aseptic loosening. Also, there was no indication of migration or loosening in the 16 hips that were implanted with an augment.

Conclusion/Recommendation

The authors conclude that the results are likely due to optimal osteointegration of the porous tantalum because of its excellent biomechanical and biological properties.

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