



Bi-cortical Contact Predicts Subsidence of Modular Tapered Stems in Revision Total Hip Arthroplasty

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- A retrospective cohort study reviewing 109 hips in 105 patients at a minimum of 2 years follow-up.
- All revisions were carried out for Paprosky type 3A or 3B femoral deficits.
- The cohort comprised 74 RECLAIM™ Revision Hip System and 35 Restoration Modular procedures.

Mean subsidence was significantly lower in the RECLAIM Revision Hip System group 2.34mm vs 5mm for Restoration Modular (p=0.007).

There was no statistical difference in significant subsidence rates, defined as >10mm, between the two groups (p= 0.317).

The authors identified that a reduced bi-cortical contact distance of <20mm and a stem length of ≤155mm (both p<0.001) were associated with higher subsidence rates. Additionally, a mean subsidence of 8.89mm was observed when a threshold of 20mm bi-cortical contact **was not** achieved compared to a mean subsidence of 2.13mm when a threshold of 20mm **was** achieved. This difference was statistically significant (p<0.001). The aseptic re-revision rate was 6.7% (n=5) in the RECLAIM Revision Hip System group and 5.7% (n=2) in the Restoration Modular group. There was no statistically significant difference in aseptic re-revision rates (p=0.162).

Key Takeaways:

A minimum bi-cortical contact of 20mm should be exceeded to reduce the risk of stem subsidence in Modular Femoral Revision stems

In this study:

- RECLAIM Revision Hip System demonstrates significantly lower mean subsidence than Restoration Modular.
- There is no statistically significant difference in clinically significant subsidence rates, >10mm, between RECLAIM Revision Hip System and Restoration Modular.
- No statistically significant difference in aseptic re-revision rate between RECLAIM Revision Hip System and Restoration Modular.
- Intra-operative imaging can be utilized to help ensure the threshold bi-cortical contact of 20mm is achieved.

For full product details and precautions, please consult the Instructions For Use.