

Outcomes of Discordant Surgical Approach for Revision Total Hip Arthroplasty

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INTRODUCTION:

The impact of discordant versus concordant surgical approaches in revision total hip arthroplasty (rTHA) remains unclear. While some evidence suggests comparable outcomes, concerns persist that a discordant approach may increase postoperative complications, particularly dislocation, due to soft tissue disruption across multiple planes. The direct anterior approach may offer improved anatomic positioning and restoration of the center of rotation, potentially lowering dislocation risk; however, its role in revisions is still uncertain. Thus, this study aims to compare discordant and concordant revisions that use the direct anterior (DA), posterior (PA), or lateral (LA) techniques to assess their influence on postoperative complications.

METHODS:

A retrospective review of 334 patients from two institutions who underwent rTHA from 2017 to 2024 was conducted. Patients were categorized into two groups: the concordant revision group (same surgical approach for primary and revision THA) and the discordant revision group (different approach for revision THA). Subgroup analysis was performed based on the revision approach, including PA, LA, and DA. Demographics, surgical characteristics, and postoperative outcomes were compared between groups.

RESULTS:

The cohort included 75 discordant and 259 concordant rTHAs. In the discordant group, 36% underwent revision via DA, 24% via LA, and 40% via PA. In the concordant group, 14% underwent DA revision, 11% underwent LA revision, and 75% underwent PA revision. The only significant baseline difference was a lower BMI in the discordant group (27.98 vs. 30.00, $p=0.014$). Regarding surgical characteristics, the discordant group had a significantly shorter hospital stay (3.42 vs. 4.28 hours, $p=0.03$). There were no significant differences in postoperative complications, including dislocations, reoperations, or 90-day readmissions.

DISCUSSION AND CONCLUSION: Discordant and concordant rTHA demonstrated similar rates of postoperative dislocation, reoperation, 90-day readmission, and overall complications. While these findings suggest that the choice of surgical approach for rTHA can be guided by surgeon preference and patient-specific factors without compromising outcomes, further investigation is warranted to determine whether the DA approach offers superior dislocation prevention in select revision scenarios.