## Paper #55

## Changing Surgical Approach from Index to Revision THA: No Increased Risk of Dislocation or Revision

Notes

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**Introduction:** Many considerations dictate preferred surgical approach in revision total hip arthroplasty (THA). No prior studies have examined outcomes based on utilizing a concordant vs. discordant approach between the primary and revision THA. This study aimed to quantify approach concordance/discordance from primary to revision THA, and assess impact on incidence of dislocation, re-revision, reoperation, and non-operative complications.

**Methods:** Between 2000 and 2018, 790 revision THAs were retrospectively identified in patients who underwent primary THA at the same academic center. Patients with primary THA performed for oncologic resection or using uncommon approaches were excluded. Surgical approach was determined for primary and revision THA with dislocations, re-revisions, reoperations, and complications determined from our total joint registry. Complication rates were compared between those with concordant and discordant surgical approaches. Mean age was 61 years, 51% were female, mean BMI was 31 kg/m2, and mean follow-up was 4 years.

**Results:** Surgical approach discordance occurred in 106 cases (13%), which was more frequent (71%, p<0.001) when the direct anterior approach was used for primary THA compared to lateral (12%) or posterior (10%) approaches. There were no statistically significant differences in the incidence of dislocations, re-revisions, reoperations, and non-operative complications among those with concordant and discordant approaches for the overall cohort and when analyzed by primary approach (p>0.13 for all). Among patients with a posterior approach during primary THA, there was a trend toward decreased dislocation risk with a revision lateral approach compared to posterior approach (5-year rate: 8% vs. 16%, respectively; p=0.24).

**Conclusion:** Comparable dislocation and complication rates were observed among revision THAs with concordant and discordant approaches between primary and revision THA. These data provide reassurance that changing vs. maintaining the surgical approach from primary to revision THA does not significantly increase dislocation risk or that of re-revision, reoperations, and non-operative complications.