No Association Between Paralabral Cysts and Arthroscopic Acetabular Labral Repair Outcomes

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DISCLOSURES: None.

INTRODUCTION: The purpose of this study was to investigate whether paralabral cysts identified incidentally on preoperative magnetic resonance imaging (MRI/MRA) predict midterm functional outcomes following arthroscopic acetabular labral repair.
METHODS: Prospectively collected data for patients undergoing hip arthroscopy by a single surgeon from 2014-2020 were retrospectively reviewed. Included patients were ≥18 years, underwent primary hip arthroscopy for the treatment of symptomatic labral tears, and completed baseline patient-reported outcome measures (PROMs) with additional follow-up at 3, 6, 12, and 24 months. Exclusion criteria were labral debridement, hip dysplasia, advanced hip osteoarthritis (Tönnis >1), or previous ipsilateral hip surgery. Patients were stratified based on the presence of paralabral cysts identified on MRI/MRA. Primary outcomes were International Hip Outcome Tool (iHOT-33) and modified Harris Hip Score (mHHS). Secondary outcomes included other PROMs and the visual analog pain scale. Outcomes were compared between cohorts using linear mixed-effects models and Fisher's exact tests. Sensitivity analyses accounted for preoperative PROMs, nonlinear improvement trajectories, and relevant baseline characteristics.
RESULTS: Of the 182 included hips (47.8% female; mean ± SD age, 36.9 ± 11.4), 30 (16.4%) had paralabral cysts. During the 2-year study period, there were no significant differences between patients with and without paralabral cysts in terms of iHOT-33 scores (weighted difference: 1.60; 95% CI: -5.09, 8.28; p=0.64), mHHS scores (weighted difference: 0.56; 95% CI: -4.16, 5.28; p=0.82), or any secondary outcomes (except for HOS–Sports Subscale at 3 months [mean difference: -11.85, 95% CI: -22.85, -0.84; p=0.035]) (**Figure 1**). Furthermore, there were no significant differences in clinically meaningful outcomes (p>0.05 for all), revision rates (p=1.00), or conversion to total hip arthroplasty between cohorts (p=1.00). These results held across all sensitivity analyses.
DISCUSSION: Following arthroscopic labral repair, patients with and without paralabral cysts experienced similar 2-year functional outcomes and clinically meaningful improvements.
SIGNIFICANCE/CLINICAL RELEVANCE: These results suggest that incidentally discovered paralabral cysts are not a contraindication for this procedure.

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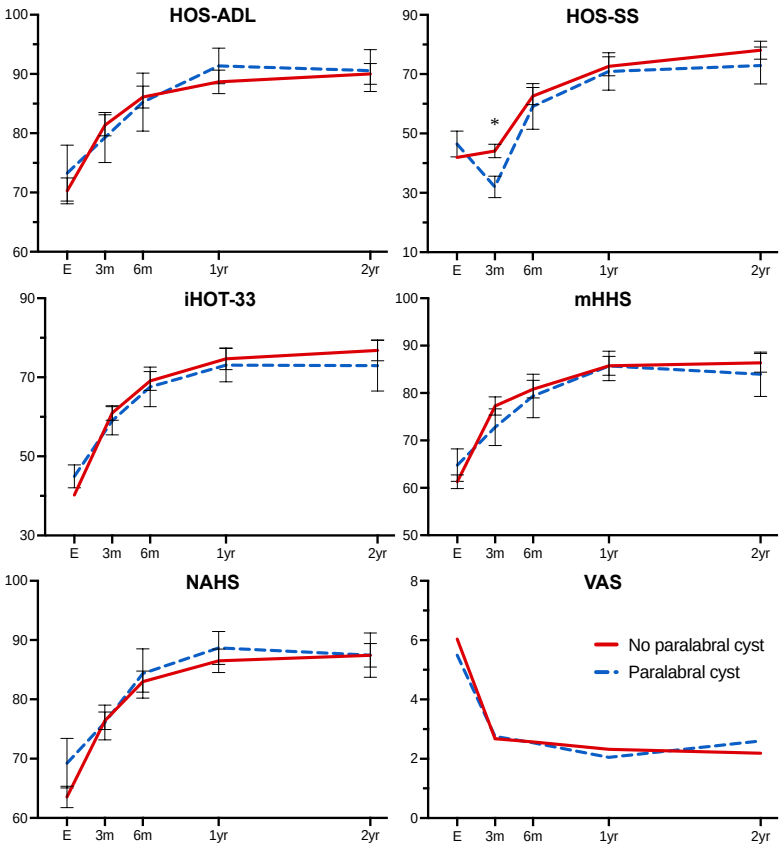

Figure 1. Patient-reported outcomes over time for patients with and without paralabral cysts
Asterisk denotes statistical significance ($p < 0.05$). Error bars denote 95% confidence intervals (but are not shown if too narrow to visualize). HOS-ADL, Hip Outcome Score-Activities of Daily Living; HOS-SS, Hip Outcome Score-Sports Subscale; iHOT-33, International Hip Outcome Tool-33; mHHS, modified Harris Hip Score; NAHS, Non-Arthritic Hip Score; VAS, visual analogue scale for pain; E, enrollment; m, months; yr, year(s).