Labral Tear Management in Patients Aged 40 Years and Older Undergoing Primary Hip Arthroscopy: A Propensity-Matched Case-Control Study Comparing Labral Reconstruction to Labral Repair with Minimum Two-Year Follow Up

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INTRODUCTION:
Previous literature has suggested that primary acetabular labral reconstruction leads to lower secondary surgeries rates than that of labral repair for patients aged ≥ 40 years. The purpose of this study is to report minimum two-year patient-reported outcome (PRO) scores, survivorship, and secondary surgeries, in patients aged ≥ 40 years who underwent primary hip arthroscopy with labral reconstruction compared to a propensity-matched primary labral repair group.

METHODS: Data were prospectively collected and retrospectively reviewed for patients who underwent a primary hip arthroscopy for femoroacetabular impingement syndrome from January 2014 to June 2018. Patients aged ≥ 40 years who underwent a labral reconstruction or a labral repair and had preoperative and minimum two-year PROs for the modified Harris Hip Score (mHHS), Non-arthritic Hip Score (NAHS), and visual analog scale (VAS) for pain were included. Patients with prior ipsilateral hip conditions and surgery, Tonnis grade > 1, hip dysplasia, or workers’ compensation status were excluded. Patients in the reconstruction group were propensity-matched 1:2 to patients in the repair group based on age, sex, and body mass index. Secondary surgeries and the achievement of the minimal clinically importance difference (MCID), patient acceptable symptomatic state (PASS), and maximum outcome improvement (MOI) were recorded.

RESULTS:
Fifty-three and 106 hips were included in the labral reconstruction and repair groups, respectively. The average follow-up time was 37.6 months. The average age for the reconstruction and repair groups were 48.01 ± 5.4 years and 48.61 ± 6.0 years, respectively. Both groups achieved significant improvements in all PROs at minimum two-years with similar achievements of MCID, PASS, and MOI. Both groups showed comparable secondary surgeries rates.

DISCUSSION AND CONCLUSION: Patients aged 40 years and older who received primary labral repair and primary labral reconstruction, achieved similar significant improvements in all PROs at minimum two-year follow up, with comparable rates of secondary surgeries and achieving MCID, PASS, and MOI. Based on these findings, labral repair remains the gold standard treatment for viable labrum in this population group, while reconstruction is a useful alternative for irreparable labrum.