

Most Hip Arthroscopy Patients Report Resolution of Mechanical Symptoms at Two Year Follow-up

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Introduction: Mechanical symptoms are common concerns for patients prior to hip arthroscopy. The purpose of this study was to evaluate the rate at which mechanical symptoms such as catching, locking, giving out, and stiffness resolve after primary hip arthroscopy for patients with labral tears secondary to femoroacetabular impingement.

Methods: This study was approved by our IRB. Patients who underwent primary hip arthroscopy reported occurrences of mechanical symptoms including catching/locking, giving out, or stiffness preoperatively and at 3-, 6-, 12-, and 24-months postoperatively. Postoperative symptom resolution was calculated, along with *t*-tests and chi-squared tests to compare continuous and categorical variables respectively. Changes in Non-Arthritic Hip Scores (NAHS) subscales such as pain, symptoms, physical function, and sports were compared between groups using *t*-tests.

Results: Of the 235 (51.9% female) patients included in this study, at baseline 155, 88, and 202 patients experienced some catching/locking, giving out, or stiffness respectively. Postoperative complete symptom resolution at 2-years was highest for the hip giving out (88.6%), then catching/locking (63.8%), then stiffness (32.0%). Body mass index (BMI) and Tönnis angle were significantly lower for patients whose symptoms resolved than those whose symptoms were unresolved for at least one patient-reported mechanical symptom ($P < .05$). For all NAHS subscores patients with resolved mechanical symptoms at 2-years scored had significantly improved outcomes than those whose symptoms did not resolve.

Discussion: This study demonstrates that mechanical symptoms such as giving out and catching/locking frequently resolve following primary hip arthroscopy in patients with labral tears due to femoroacetabular impingement, with resolution rates of 88.6% and 63.8%, respectively, at two years postoperatively. In contrast, stiffness was less likely to resolve, persisting in a substantial proportion of patients. The association of lower BMI and Tönnis angle with symptom resolution suggests that patient-specific factors may influence postoperative outcomes. Importantly, patients who experienced symptom resolution reported significantly better functional outcomes across all NAHS subscales, underscoring the clinical relevance of resolving mechanical symptoms. These findings highlight the potential for targeted preoperative counseling and postoperative management strategies to optimize patient expectations and recovery trajectories.

Significance/Clinical Relevance: The high resolution rates for giving out and catching/locking symptoms offer reassurance to patients experiencing these issues preoperatively. Overall, this study supports the importance of mechanical symptom assessment as part of comprehensive patient evaluation and postoperative monitoring, ultimately facilitating shared decision-making and personalized care in hip preservation surgery.

