

How Long Do Patients Take to Regain their Baseline Strength Following Arthroscopic Treatment for Femoroacetabular Impingement?

Sarah Remedios, Ivan Wong

INTRODUCTION: It has been well-established that arthroscopic treatment of femoroacetabular impingement (FAI) yields favourable outcomes compared to conservative treatment. Most patients follow a rigorous post-operative rehabilitation protocol following surgery, however it is unclear how long it takes for patients to regain their strength or exceed their baseline strength post-operatively. The objective of our study was to assess post-operative improvements in strength in patients who received arthroscopic treatment of FAI.

METHODS: Patients who underwent hip arthroscopy for FAI between 2019 and 2021 with a minimum clinicoradiological follow-up of one year were included. Primary outcomes included strength measurements (flexion, extension, abduction, and internal/external rotation) as measured using a handheld dynamometer pre-operatively and at regular intervals post-operatively until the one-year post-operative time point. Secondary outcomes included International Hip Outcome Tool (iHOT-33) scores.

RESULTS: Fifty patients were evaluated with a mean age of 38.2 ± 16.4 years at the time of the surgery. The mean duration of follow-up was 1.58 ± 0.41 years. At the 6-month follow-up, 58% of met baseline flexion strength and 92% of patients met baseline extension strength measures. Only 58% of patients met baseline strength with internal/external rotation. By the one year mark, over 70% of patients met baseline strength measures for flexion, extension, and internal and external rotation. Interestingly, only 57% of patients met baseline strength for abduction. All patients improved post-operatively with respect to their iHOT-33 scores ($p < 0.001$).

DISCUSSION AND CONCLUSION: Treatment of FAI with hip arthroscopy requires post-operative rehabilitation. Most patients can expect to return to their baseline strength levels by one year post-operatively following diligent rehabilitation as guided by a physiotherapist. Abduction strength is the slowest strength outcome to return to baseline and rehabilitation programs may need to be tailored accordingly.