

FUNCTIONAL OUTCOMES OF HIP ARTHROSCOPY IN AN ACTIVE DUTY MILITARY POPULATION UTILIZING A CRITERION-BASED EARLY WEIGHT BEARING PROGRESSION

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ABSTRACT

Introduction: Hip arthroscopy allows surgeons to address intra-articular pathology of the hip while avoiding more invasive open surgical dislocation. However the post-operative rehabilitation protocols have varied greatly in the literature, with many having prolonged periods of limited motion and weight bearing.

Purpose: The purpose of this study was to describe a criterion-based early weight bearing protocol following hip arthroscopy and investigate functional outcomes in the subjects who were active duty military.

Methods: Active duty personnel undergoing hip arthroscopy for symptomatic femoroacetabular impingement were prospectively assessed in a controlled environment for the ability to incorporate early postoperative weight-bearing with the following criteria: no increased pain complaint with weight bearing and normalized gait pattern. Modified Harris Hip (HHS) and Hip Outcome score (HOS) were performed preoperatively and at six months post-op. Participants were progressed with a standard hip arthroscopy protocol. Hip flexion was limited to not exceed 90 degrees for the first three weeks post-op, with progression back to running beginning at three months. Final discharge was dependent upon the ability to run two miles at military specified pace and do a single leg broad jump within six inches of the contralateral leg without an increase in pain.

Results: Eleven participants met inclusion criteria over the study period. Crutch use was discontinued at an average of five days following surgery based on established weight bearing criteria. Only one participant required continued crutch use at 15 days. Participants' functional outcome was improved postoperatively, as demonstrated by significant increases in HOS and HHS. At the six month follow up, eight of 11 participants were able to take and complete a full Army Physical Fitness Test.

Conclusions: Following completion of the early weight bearing rehabilitation protocol, 81% of participants were able to progress to full weight bearing by four days post-operative, with normalized pain-free gait patterns. Active duty personnel utilizing an early weight bearing protocol following hip arthroscopy demonstrated significant functional improvement at six months.

Level of Evidence: Level 4, Case-series

Key words: Active-duty military, functional outcomes, hip arthroscopy, postoperative weight bearing

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No funding was received for this study. Each author certifies that he or she has no commercial associations that might pose a conflict of interest in connection with the submitted article.

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