

# Sex-Dependent Differences in Preoperative, Radiographic, and Intraoperative Characteristics of Patients Undergoing Hip Arthroscopy: Results From the Multicenter Arthroscopic Study of the Hip Group.

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## **Abstract**

### **PURPOSE:**

To compare preoperative, radiographic, and intraoperative findings between male and female patients undergoing hip arthroscopy.

### **METHODS:**

We performed a retrospective review of a multicenter registry of patients undergoing hip arthroscopy between January 2014 and January 2017. Perioperative data from patients who consented to undergo surgery and completed preoperative patient-reported outcome questionnaires were analyzed to determine the effect of sex on preoperative symptoms, patient-reported outcomes, radiographic measures, and surgical procedures.

### **RESULTS:**

A total of 1,437 patients (902 female and 535 male patients) with a mean age of 34 years were enrolled in the study. Female patients reported greater pain preoperatively on a visual analog scale (55.42 vs 50.40,  $P = .001$ ) and deficits in functional abilities as per the modified Harris Hip Score (53.40 vs 57.83,  $P < .001$ ) and International Hip Outcome Tool 12 (31.21 vs 38.51,  $P = .001$ ) than male patients. There was a significant difference in the alpha angle ( $67.6^\circ$  in male patients vs  $59.5^\circ$  in female patients,  $P < .001$ ) corresponding with a higher prevalence of cam deformity in male patients (94.6% vs 84.5%,  $P < .001$ ). Male patients had less range of motion in flexion ( $-5.67^\circ$ ,  $P < .001$ ), internal rotation ( $-8.23^\circ$ ,  $P < .001$ ), and external rotation ( $-4.52^\circ$ ,  $P < .001$ ) than female patients. Acetabular chondroplasty was performed in 58% of male patients versus 40.2% of female patients ( $P < .001$ ). Acetabuloplasty was performed in 59.1% of male patients versus 43.9% of female patients ( $P < .001$ ).

### **CONCLUSIONS:**

Male and female patients undergoing hip arthroscopy differ statistically in terms of preoperative hip function, hip morphology, and self-reported functional deficits, as well as the prevalence of surgical procedures. However, they do not differ significantly in terms of symptom localization, duration, or onset. The observed differences in preoperative functional scores between sexes, although statistically significant, may not represent clinically meaningful differences.

### **LEVEL OF EVIDENCE:**

Level III, retrospective cross-sectional study.

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