pain (VAS). Dancers were excluded if they were unwilling to participate, had a previous hip condition (i.e. hip dysplasia (lateral-center-edge angle (LCEA) < 18°), underwent previous surgery on ipsilateral hip, or had a Tönnis osteoarthritis grade > 1. The minimal clinically important difference (MCID), patient acceptable symptomatic state (PASS), and maximum outcome improvement satisfaction threshold (MOS) were used to evaluate patient postoperative satisfaction and improvement. Results: Fifty-two hips (49 dancers) (82.5%) had minimum 5-year follow-up. The average age of the cohort was 30.0 ± 17.1 years, and all patients were female. The average follow-up time was 79.1 ± 23.2 months. Dancers significantly improved in all PROMs (p < 0.001). Additionally, they had a high rate of satisfaction of 84.1 ± 2.1 at minimum 5-year follow-up. They achieved high rates of MCID for the mHHS, NAHS and VAS for pain, 83.3%, 85.7% and 85.7%, respectively and high rates of PASS for the mHHS, and iHOT-12, 90.5% and 91.0%, respectively. Six dancers (14.3%) underwent revision hip arthroscopy and three dancers (5.8%) converted to total hip arthroplasty. The rate to return to dance was 79.1%. At minimum 5-year follow-up 89.7% of dancers continued to dance and 57.7% dancers were able to return at the same or higher level prior to surgery. Conclusion: Primary hip arthroscopy in dancers was successful as they experienced favorable PROMs, and achieved high rates of MCID for the mHHS, NAHS, and VAS and high rates of achievement for the MCID and PASS. Dancers experienced a high rate of 89.7% of continuing to dance at least 5 years after surgery with 57.7% returning to the pre-injury or higher performance level.

Category: Hip/Groin/Thigh

Hip Sport Test as a Measure of Functional Strength and Range of Motion Prior to Hip Arthroscopy

Abstract ID# 22081

All Authors:
Joseph J. Ruzbarsky MD UNITED STATES
Spencer M Comfort BS UNITED STATES
Hannah Katherine Day MS UNITED STATES
Marc J. Philippson MD UNITED STATES

Summary:
Will a standardized hip sport test have a correlation with post op hip strength, ROM and PRO?

Data:
Purpose As the field of hip arthroscopy continues to develop, functional measures and testing become increasingly important for patient selection, managing patient expectations prior to surgery, and physical readiness for return to athletic participation. The Hip Sport Test (HST) was developed to assess strength, coordination, agility, and range of motion prior to and following hip arthroscopy as a functional assessment. However, the relationship between HST and hip strength, range of motion, and hip-specific patient reported outcome (PRO) measures have not been investigated. The purpose of this study was to evaluate the correlation between the HST scores and measurements of hip strength and range of motion prior to undergoing hip arthroscopy. Methods Between September 2009 and January 2017, patients aged 18-40 who underwent primary hip arthroscopy for the treatment of femoroacetabular impingement with available pre-operative HST, dynamometry, range of motion, and functional scores (mHHS, WOMAC, HOS-SSS) were enrolled. Patients were excluded if they were <18 or >40 years old, had a Tegner activity score < 7, or did not have HST and dynamometry evaluations within one week of each other. Muscle strength scores were compared between affected and unaffected side to establish a percent difference with a positive score indicating a weaker affected limb and a negative score indicating a stronger affected limb. Correlations were made between HST and strength testing, range of motion, and PROs. Results: A total of 350 patients met inclusion criteria. The average age was 26.9 ± 6.5 years, with 34% females and 36% professional athletes. Total and component HST scores were significantly associated with measure of strength most strongly for flexion (rs=−0.20, p < 0.001), extension (rs=−0.24, p < 0.001) and external rotation (rs=−0.20, p < 0.001). Lateral and diagonal agility, components of HST, were also significantly associated with muscle strength imbalances between internal rotation versus external rotation (rs=−0.18, p=0.011) and flexion versus external rotation (rs=−0.12, p=0.03). In terms of range of motion, a significant correlation was detected between HST and internal rotation (rs=−0.19, p=0.001). Both the total and component HST scores were positively correlated with pre-operative mHHS, WOMAC, and HOS-SSS (p<0.001 for all rs). Conclusion: The Hip Sport Test correlates with strength, range of motion, and PROs in the preoperative setting of hip arthroscopy. This test alone and in combination with other diagnostic examinations can provide valuable information about initial hip function and patient prognosis. Keywords functional testing; hip strength; range of motion; outcomes

Category: Hip/Groin/Thigh

How Long Do Patients Take To Regain Their Baseline Strength Following Arthroscopic Treatment For Femoroacetabular Impingement?

Abstract ID# 22399

All Authors:
Sarah Remedios CANADA
Ivan Wong MD, FRCSc, MACM, Dip. Sports Med CANADA

Summary:
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.

Data:
Objective: 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 clinical and radiological 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). Conclusions: 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.

Category: Hip/Groin/Thigh

Clinical Outcomes Among Individuals with Global Acetabular Retroversion who Underwent Hip Arthroscopy for FAI with Minimum 5-Year Follow-Up

Abstract ID# 23558

All Authors:
Ian Savage-Elliot MD UNITED STATES
Dhruv S Shankar BS UNITED STATES
Zachary I Li BA UNITED STATES
Kinjal Vasavada B.A UNITED STATES
Berkcan Akpınar MD UNITED STATES
Thomas Youm MD, FACSIM UNITED STATES

Summary:
The purpose of this study was to compare patient-reported outcomes (mHHS, NAHS) and clinical threshold achievement rates (MCID, PASS, SCF) of patients with radiographic signs of global acetabular retroversion, including ischial spine, posterior wall, and crossover signs who underwent hip arthroscopy for FAI with minimum follow-up of 5 years.

Data:
OBJECTIVE: The purpose of this study was to compare functional outcomes and clinical threshold achievement rates of patients with radiographic signs of global acetabular retroversion who underwent hip arthroscopy for FAI with minimum follow-up of 5 years. METHODS: Patients were identified from a single-surgeon prospectively-collected database who underwent primary hip arthroscopy for treatment of FAI. Patients completed patient-reported outcome (PRO) surveys at both baseline and 5-year follow-up. Demographic data was collected including age, sex, BMI at time of surgery, and patient-reported symptom length. Intra-operative findings were recorded, including the Outerbridge grade, presence of...