

ically. The study also suggests that outcome is influenced by the extent of articular changes and ongoing synovial activity of the disease.

**Paper 42: Hip-Specific Functional Testing in Healthy Volunteers and in Pre- and Post-Operative Hip Patients Undergoing Hip Arthroscopy for Femoroacetabular Impingement** PATRICK MORGAN, MD, USA, PRESENTING AUTHOR · University of Minnesota Minneapolis, Minnesota, USA

#### SUMMARY

We compared the functional testing data between 40 normal volunteers and 62 patients tested at preoperative and 3 and 6 month post-operative time points and found significant improvement in all tests and normalization in three of the six tests administered.

#### DATA

Return to high-level activity after hip arthroscopy has been documented in high-level athletes (1). In the community population, however, there is little evidence to guide the physician deciding when the average patient might be prepared to return to sport. We hypothesize that patients with femoroacetabular impingement (FAI) would perform poorly compared to individuals without hip pathology. We further hypothesized that patients treated with hip arthroscopy would, after appropriate rehabilitation, improve from their pre-operative performance and approach or reach a the performance of healthy volunteers.

**Methods:** Forty normal volunteers were screened for hip pathology through history, physical examination, and administration of the HOOS outcome score (2). Each normal volunteer then performed the following tests: single leg hop, single leg timed hop, crossover triple hop, modified stand and reach, retro step-up, and a modified shuttle run. Sixty-two patients undergoing hip arthroscopy for FAI correction and labral repair versus debridement were then tested pre-operatively and again at 3 and 6 months.

**Results:** All six tests showed statistically significant poorer performance in pre-operative patients when compared to normal subjects ( $p < 0.05$ ). Patient performance improved significantly for all six tests during the first six post-operative months. Three tests—the modified stand and reach, timed single-leg hop, modified shuttle run,—showed improvement so as to be indistinguishable from the normal population ( $p = 0.387, 0.333, \text{ and } 0.226$ ). The entire battery of tests required 20-30 minutes to administer.

**Discussion:** Return to sport and fitness activities is a major concern of patients undergoing a surgical proce-

dure (3). Better post-operative functional testing has been associated with increased likelihood of returning to higher-level activities (4). As post-operative rehabilitation protocols for arthroscopic hip procedures are refined, it is our hope that these tests may be used as metrics to evaluate our ability to prepare patients for return to sport.

#### DISCUSSION

**References:** 1. Philippon M, Schenker M, Briggs K, Kuppersmith D. Femoroacetabular impingement in 45 professional athletes: associated pathologies and return to sport following arthroscopic decompression. *Knee Surg Sports Traumatol Arthrosc* 2007; 15(7): 908-914.

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#### Paper 43: Lumbar Plexus Block for Pain Control after Hip Arthroscopy. A Randomized Controlled Trial

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#### SUMMARY

Lumbar plexus block (LPB) combined with a multimodal analgesic regimen reduced pain on the day of hip arthroscopy surgery and can be considered for reduction of short-term pain.

#### DATA

**Introduction:** The indications for hip arthroscopy are rapidly increasing to include both intra- and extra-articular disorders such as femoro-acetabular impingement, synovial disorders, abductor pathology, etc. These large, complex cases are associated with moderate to severe postoperative pain, and treatment with opioids can result