**Hip Pathology in a D1 Collegiate Rower**

DeMarco G*, Norkus S*, DiNapoli D†; *Quinnipiac University, Hamden, CT †Yale University, New Haven, CT

**Background:** The athlete is a 19 year old female rower who began her collegiate athletic career presenting with a long history of left hip signs and symptoms including flexor tendonitis for which she received treatment for 3 months prior. After discontinuing activity for the summer and entering as a freshman, she reported to the ATR in Sept 2007 with similar pain. Upon evaluation, the athlete complained of pain deep in the hip and gluteal region that was dull and achy at rest. The athlete reported that the pain worsened when getting up after prolonged rest and described it as sharp during activity with constant clicking. ROM revealed limited active and passive hip flexion, abduction, external rotation, and internal rotation. The Hip Scouring Test was positive. Treatment for pain control was initiated, and the athlete was referred to the physician for further evaluation. **Differential Diagnosis:** Labrum Tear, Hip Sprain, or Tendonopathy.

**Treatment:** The athlete was removed from participation and completed a rehabilitation program. In October 2007, the athlete saw an orthopedic hip specialist; an MRI was ordered and revealed a labrum tear in the left hip. The athlete then underwent a labrum debridement in 11/07 and followed up with a rehabilitation program. She was cleared to participate for the spring season. Signs and symptoms appeared bilaterally after her first day of practice. The athlete was removed from participation and continued rehabilitation for the remainder of the spring. During the summer of 2008, she sought another opinion, this time the MRI and X-rays revealed Bilateral Femoral Acetabular Impingement; both CAM and Pincer type. Surgery was scheduled for December 2008. The athlete was removed from all rowing activities, and a pre-surgical rehabilitation protocol was initiated. The primary goal of the program was hip and core strengthening. The athlete underwent a surgical left hip dislocation used to shave down the superior ridge of the acetabulum and the neck of the femur on 12/19/08. She was non-weight bearing for 5 weeks with rehabilitation initiated in Feb 2009. She began partial weight bearing and as tolerated increased to full weight bearing over the course of 3 weeks. The athlete was also instructed in a home exercise program with the only limitation being to not exceed 110 degrees of hip flexion. At the conclusion of rehabilitation in late April of 2009, the athlete had returned to near full strength but was still lacking in hip abduction and external rotation. She stated that walking was much more comfortable than prior to the surgery, but her right side still felt stiff. The athlete underwent surgery on the right side in July 2009 and is currently undergoing rehabilitation. **Uniqueness:** Rowing comprises of only 2.2% of all college athletics in the U.S. The athlete’s underlying pathology went undiagnosed for almost 2 years. Impingement is a common cause of labrum tears and impingement types can be gender specific; this athlete had both types. Overall, impingement only accounts for 0.6% of reported hip pathologies. For surgery, arthroscopy is more commonly performed to treat impingement and a surgical hip dislocation was chosen. Lastly, hip resurfacing surgery was just recently approved in May of 2006. **Conclusions:** A thorough and extensive evaluation with follow-ups is crucial to avoid misdiagnosis and to discover the etiology of ongoing symptoms. If a labrum tear is suspected, structural abnormalities should be sought out in diagnostic imaging as well as focusing on the labrum. **Word Count:** 563