Non Traumatic Labral tear femoroacetabular impingement: Level 3 Case Study
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Background: Hip injuries are significant because it is mechanically resound joint. Usually a predisposed postural abnormality in the hip, stress, and hard cutting motions can cause acetabular labral tears. Pain is presented deep in the groin. Other injuries, such as a contusion, piriformis syndrome (siatic nerve), bursitis, arthritis, snapping hip syndrome, or an injury above or below the hip can create diffuse pain throughout the hip.

Clinical Presentation: Patient: A 19-year-old female Division 3 lacrosse player, was referred for the reconstruction of her left acetabular labrum. Client had no major medical history, but presented with a forward pelvic tilt, as well as an apparent leg length discrepancy. Athlete initially had anterior superior pain in femur and pelvic region with pain radiating distally. Athlete was sent for X-rays after two weeks of antalgic gait. She stated that gait pain was acute, but intensified with play. There was minimal bruising in the surrounding areas but mostly in the psoas fossa in the labrum. After x-rays and MRI results, athlete was diagnosed with a superior labral tear femoroacetabular impingement, as well as hip instability.

Intervention: Initial treatment from the athletic trainers included rehab to gain strength above and below the injured point prior to surgery. The surgery consisted of left hip arthroscopy with labral repair, as well as capsulorrhaphy. After surgery, athlete was give anti-inflammatory for pain and placed in a post-arthroscopy hip brace to provide limited motion of hip flexion for 2-3 weeks. Athlete was advised to partial weight bearing for four weeks. Athlete used a continuous passive motion machine postoperative to aid in joint recovery. Rehabilitation after surgery was to gradually restore range of motion, diminish pain, and control the swelling and inflammation. There is mixed research about surgery with this injury, primarily debating if surgery will necessarily fix the positional fault. Surgery is one of the last options with this injury. Open hip surgery can be prolonged and unfavorable for an athlete that wants to return to play. As elite athletes are able to perform at high levels with a compromised action. Increasing ROM and flexibility is crucial to help the healing and stop the reoccurrence of the injury.

Comparative Outcomes: The athlete returned to play with full motion and restoration in the hip with no brace. The doctor stated that she has weak hip flexors that create the instability and pain. The athlete takes preventative measures to stretch and self-myofacial release her hip musculature, so this positional fault is unlikely to occur again. This is a typical situation with a hip labral tear for an athlete as other populations have different preventative strategies.

Conclusion: This injury occurs usually in the older population rather than college athletes. This labral tear occurred because of the degeneration of tissue and postural abnormalities. Labral tears are one of the most uncommon injuries amongst collegiate athletes therefore making it difficult to diagnosis. The athlete still suffers from similar pain but it is stated that it is just thought to be tight hip flexors.

Clinical Bottom Line: Many issues could be concluded from radiating hip pain. Additionally, we see that surgery may be essential for one who wants to continue their career in sports and an active lifestyle. It took over 6 months before the client was back to full activity. However, the x-ray confirmed a tear of the superior acetabular labrum and treatment to correct this positional fault was to receive surgery.

Word Count: 597