Cam Type Femoroacetabular Impingement with Labral Tear in A Collegiate Ice Hockey Player: A Case Study
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Background: Femoroacetabular Impingement (FAI) is a relatively new concept for sports medicine practitioners that’s seen increased prevalence over the last 15 years. FAI can be a debilitating disorder for athletes and a complex diagnosis for clinicians, particularly those involved in sports such as hockey, soccer, or basketball that require constant cutting and acceleration/deceleration movements. We present a case of a Cam FAI in a 20-year-old Division I Men's Ice Hockey player in December 2009. The athlete initially complained of soreness in the right hip that manifested as pain with skating and resisted hip flexion. He was initially diagnosed with a hip flexor strain and treated conservatively with light stretching, ice, and rest; but did not respond well to conservative care. The case was managed surgically in June 2010, and rehabilitation was implemented to effectively return the athlete to normal function and competition. Differential Diagnosis: Cam or pincer-type FAI, hip flexor strain, adductor strain/tendinopathy, athletic pubalgia, femoral neck stress fracture, and pubic symphysis. Treatment: With the aid of radiographic and magnetic resonance imaging (MRI), the pathology was diagnosed as bilateral cam-type FAI. The decision to undergo arthroscopic surgery was made based on debilitating pain levels in the right hip, and his desire to fully participate the following season with minimal limitations. Surgical intervention involved right hip arthroscopy to improve joint congruency, labral resection, and osteochondroplasty to remove the osseous cam deformity on the femoral head-neck junction. The decision was made to delay surgery on the left hip because symptoms were not as severe or functionally limiting. A rehabilitation program was then established to eliminate pain, improve ROM, increase hip musculature strength, and restore sport specific function. Uniqueness: This particular case was unique in that FAI is a relatively new concept that involves activity-specific dynamic hip motion, and because it presented in an acute fashion, rather than an expected slow, insidious onset. The bilateral considerations also make management of this case unique because of the tolerable symptoms in the left hip, and the decision to delay surgery on the left hip until post season. Conclusion: After reviewing the case and literature related to FAI prevalence, the management of this case was appropriate given the athletes eventual return to play after 14 weeks, and his successful progression from initial injury to unlimited status. It also demonstrates the complex clinical evaluation challenges and the need for effective clinical reasoning and differential diagnosis skills. Effective surgical intervention and rehabilitation goals were essential in the successful management of this case. The athlete continued with rehabilitation on the right hip throughout the season, and was scheduled to undergo corrective arthroscopic surgery on his left hip post season. Word Count: 443