Bilateral Knee Pain in a Division 1 Field Hockey Player
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**Background:** At the end of pre-season camp, a 19 year old collegiate field hockey player complained of chronic pain and soreness in both knees. She had a history of intermittent knee pain that dated back to her youth. Two years prior, the athlete started to notice her current signs and symptoms; at which time the athlete stopped figure skating, but she continued to play field hockey. In high school her pain was diagnosed as tendonitis and treated symptomatically. The athlete transferred to the current institution from another university where she had received treatment but the condition did not improve. During initial evaluation there was apparent inflammation in both knees primarily along the patella tendon and VMO attachment. There was palpable tenderness around the lateral aspect of both patellae and along the tendon. ROM was full and a decrease in both flexion and extension strength was noted. The structural integrity of the joints was intact. Conservative measures were taken to include: proper warm-up and stretching, pain and inflammation management, and a lower extremity strengthening program all while the athlete performed as tolerated at practice. The athlete was non-compliant with treatment and continued to experience pain thus she was self limited in all activity for the remainder of the season. During winter break the athlete was to continue with her rehabilitation and sought outside treatment from a physical therapist at home. Upon arrival back to school and start of the spring season, no improvements were noted and the athlete was referred to the team physician for further examination. **Differential Diagnosis:** Chronic bilateral patella femoral syndrome; patellar tendonosis; plica quadriceps muscle atrophy. **Treatment:** Following a physical exam, the physician recommended blood work and an MRI with the suspicion of patella femoral syndrome; he also discussed cortisone injections pending results of the diagnostics. The athlete elected to receive the injections immediately; this was done and provided no relief. An MRI was then obtained which indicated Hoffa’s Disease, impingement of the infrapatellar fat pad. With this diagnosis the athlete was advised to continue treatment of rehabilitation and the possibility of surgical intervention via arthroscopic resection was discussed with her. The athlete sought out a second opinion that confirmed the diagnosis but based on this opinion opted against surgery because of a concern of a reoccurrence. The athlete was prescribed treatment of phonophoresis. This method was utilized for a month at which time the athlete proclaimed it wasn’t helping and stopped receiving treatment. The athlete no longer participates in field hockey and continues to experience pain even in daily living. **Uniqueness:** There are reports of Hoffa’s Disease being present in less than 1% of patients undergoing knee arthroscopy. Hoffa’s Disease is characterized by inflammation, swelling, hypertrophy, fibrosis, and/or calcifications of the infra-patellar fat pad. While typically thought of as a chronic injury, there are reports of acute onset fat pad irritation. The fat pad itself is highly innervated with free nerve endings leaving it a likely source of anterior patellar pain. A recent retrospective cohort study has indicated that patients with isolated Hoffa’s disease without additional concomitant pathology can expect long term improvement or resolution of symptoms following an arthroscopic resection. **Conclusions:** Persistent patellar femoral syndrome / anterior knee pain requires appropriate imaging to ensure proper diagnosis. Patellar impingement syndromes like Hoffa’s syndrome can cause debilitating pain because of the large amount of sensory innervations of the fat pad. Arthroscopic resection appears to be a good long term solution permitting return to normal activity. **Word Count:** 578