AVULSION FRACTURE OF LESSER TROCHANTER
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**Background:** A 16 year old male high school football player reported feeling pain in his left groin region during a pre-season scrimmage. The mechanism of injury was a forceful abduction, sustained while the athlete was attempting to block an offensive lineman. The athlete was evaluated off the field. There was no obvious deformity, edema, or ecchymosis. The athlete reported a pain level 5/10 at the time of injury. Patient had decreased range of motion with hip flexion, extension, adduction, and abduction. Manual muscle testing of the left hip musculature 2+/5. Manual muscle testing of the right hip musculature 5/5. Positive special test was the Faber test. A positive Faber test is indicative of an iliopsoas, sacroiliac, or hip joint abnormality. The athlete had no neurological damage. **Differential Diagnosis:** Left adductor strain, hip flexor strain, hip extensor strain, avulsion. **Treatment:** After the initial evaluation the patient was diagnosed with a 2nd degree adductor strain. The athlete had pain, but was able to walk and function without major difficulty. The athlete was instructed to ice for twenty minutes every two hours. After six hours the pain increased to a point where the athlete could no longer walk or function. The athlete was immediately taken to a family physician. The family doctor ordered x-rays of hip which revealed an avulsion fracture of the lesser trochanter. The family doctor referred the athlete to an orthopedic surgeon for further evaluation. The orthopedic surgeon ordered an MRI of the hip to see how much the lesser trochanter was displaced. After reviewing the MRI the surgeon recommended the athlete try a rest and rehabilitation program before resulting to surgery. Since the athlete is only 16 the surgeon felt there was a good chance the bone would repair itself. The orthopedic surgeon instructed the athlete to be non-weight bearing on crutches for eight weeks. After the eight week rest period the athlete will begin a four week intensive rehabilitation program to regain range of motion, strength, and conditioning. The first week of rehabilitation consisted of mild stretching, walking, and proper gait re-training. In the second week the athlete began jogging, and progressed to running by the end of the week. During week three of rehabilitation the athlete started mild lower body weight lifting to increase strength. In week four the athlete preformed sport specific activities such as blocking drills. Twelve weeks after the injury occurred the athlete was cleared for return to full practice and game activity. **Uniqueness:** The patient’s signs and symptoms at the time of injury are typically seen with an adductor strain. The initial evaluation did not reveal anything that would suggest a possible avulsion fracture. The conservative treatment is also unique to this case. Typically an avulsion fracture of this extent is surgically repaired. Because the athlete is only 16 and still growing the surgeon chose a conservative method to prevent further damage to the epiphyseal plate. If the conservative treatment is unsuccessful surgery is still an option. **Conclusion:** This injury was very difficult to diagnose. When the athlete came out of the game all the signs and symptoms were indicative of an adductor strain. The athlete even wanted to return to the game. The athlete was not allowed to return because of the chance for further injury. This case should make athletic trainers aware that injuries to the groin region are not always as simple as they may seem. In this case the patient presented with mild symptoms of a much greater injury. **Key words:** avulsion fracture, lesser trochanter.

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