TACSM Abstract – Clinical Teaching

Distal Rectus Femoris Muscle Tear in Division I Track And Field Runner

KAITLIN J. RANDLE

Athletic Training Program; Baylor University; Waco, TX

Category: Undergraduate

Gallucci, Andrew (Andrew_Gallucci@baylor.edu)

ABSTRACT

CLINICAL PRESENTATION & EXAM: An 18-year-old 400-meter runner came to Baylor as a freshman on the Track and Field team complaining of chronic right quadriceps pain. Upon evaluation, it was discovered that he had an obvious deformity and lacked much strength. It was also noted that there was a lateral outswing on the involved leg. ANATOMY & PATHOLOGY: It was determined through the patient’s history that he had sustained a distal rectus femoris muscle tear by way of direct blow to the anterior thigh while casually running eight years prior to the evaluation. Rectus femoris tears most commonly occur as a result of forced knee flexion combined with an eccentrically contracted muscle. Though the muscle can detach proximally or distally, distal ruptures are concluded to be rare to the general and athletic population. DIAGNOSTIC TESTING & CONSIDERATIONS: Myositis ossificans, quadriceps strain, quadriceps contusion, benign fibrous tumor. TREATMENT & RETURN TO ACTIVITY: At the time of the injury, there was no imaging done, and he was not referred to a specialist. Immediate diagnosis and treatment are suggested for such injuries. The patient was introduced to a maintenance rehabilitation protocol that focused on strengthening the core and quadriceps muscle group with a primary focus on the vastus medialis. His treatment is serving as a preventative method from further injuries since the athlete is not severely bothered by his injury. As athletic trainers, we must acknowledge special circumstances and be flexible in our management plans—what works for the average injury may not be necessary for another.