A 21-year-old male football player sustained an injury to the left quadriceps while being struck laterally by an opposing player’s knee. Athlete continued to play but complained of receiving a “thigh bruise” to the athletic trainer. Immediately after practice the athlete was treated with a light stretch and ice. Two hours post practice the athlete returned complaining of increased pain while walking, especially when climbing stairs. He reported taking 800mg of Ibuprofen for the pain. Upon inspection he had significant swelling in the quadriceps as well as into the knee capsule. Quadriceps was stiff to the touch and point-tender along the distal-medial aspect. Active knee flexion was below 90° and painful, active knee extension was WNL but painful, active hip flexion/extension was not WNL due to pain. Passive ROM was limited secondary to pain. Distal pulses were strong and sensation was normal. Special tests of the knee were inconclusive because of increased inflammation. The differential diagnosis at this time was a quadriceps contusion, fracture of the femur, knee pathology, or quadriceps compartment syndrome. The athlete was treated with ice and electric-stim. He was sent home with a compression wrap and crutches. Athlete was instructed not to take any more medication and to report any increase in symptoms or concerns to the health center. Later that evening the athlete’s symptoms worsened and he was taken to the ER. The athlete underwent diagnostic testing that included an x-ray that was determined to be negative. Preoperative left compartment pressures were measured. Anterolateral compartment was 112 mmHg, the posterior compartment was 80 mmHg, and his medial compartment was 75 mmHg. The final diagnosis was quadriceps compartment syndrome. Patient was taken to the OR for a fasciotomy, a 13.5” lateral incision was made along with a 7.5” medial incision and the fascial compartments were then released. Compartment pressures were remeasured revealing pressures of 5 mmHg in the lateral compartment, 3 mmHg in the medial compartment, and 10mmHg in the posterior compartment. Wounds were left open, copiously irrigated, and covered with dressing and an ace wrap. Wound tension was provided by vessel loops. The wound was slowly tightened over the course of the next eight days. Once the wound was ready to be closed the athlete was taken to the OR for irrigation, debridement, and primary wound closure. Patient left the hospital the following day able to weight bear as tolerated with crutches. Percocet was prescribed for pain and was instructed to take aspirin for deep venous thrombosis prophylaxis. Rehabilitation began immediately taking care not to over stress the scar area. Two-week post-op stitches were removed and a slight infection of the proximal lateral scar was treated with antibiotics. Three weeks post-op the athlete complained of increased medial knee pain, and an MRI was scheduled. The results of the MRI showed the athlete sustained a full thickness articular cartilage defect of the medial patellar facet with associated subchondral marrow changes. This injury to the knee was attributed to a possible subluxation at the time of injury. Rehabilitation continued with knee taping pulling the patella medially. At five weeks the athlete has now begun performing functional drills. Quadriceps compartment syndromes are rare due to the size of the myofascial compartments and large potential space, which allows for a greater build up of swelling/bleeding before pressures begin to rise. Compartment syndromes have potentially devastating consequences if misdiagnosed and not treated promptly. It is important for athletic trainers to consider this injury while evaluating athletes with proximal leg swelling.