Acute Traumatic Multi-joint Injuries in a Division I Female Soccer Athlete.
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**Background:** An 18 year old Division I female soccer forward with no previous history of injury to her left side collided with a goalie during game play. Athlete was unable to report a detailed mechanism of injury (MOI). The athlete presented to the athletic trainer complaining of pain from her left knee to her left ankle with immediate moderate swelling and no associated discoloration or deformity. Palpation revealed severe tenderness along all medial knee structures, lateral knee structures, patellar tendon, medial and lateral hamstring tendons, in the popliteal fossa, along the tibia, fibula, and the bilateral ankle ligaments. Neurological symptoms such as tingling and mild numbness were also reported that radiated into the foot and toes. Neurologic symptoms subsided after approximately 10 minutes. She was placed in an immobilizer and was non-weight bearing (NWB). **Differential Diagnosis:** Grade II medial collateral ligament (MCL) sprain, patellar subluxation, proximal tibia fracture, medial ankle sprain, lateral ankle sprain, fibular head fracture with associated Peroneal Nerve involvement. **Treatment:** Athlete received an MRI, which revealed a compression fracture of the anterior medial tibial plateau, near complete tear of the MCL, and increased signal in the posterior cruciate ligament (PCL). Radiographic exam of the ankle revealed no fractures. Athlete was NWB for four weeks and engaged in a rehabilitation program to decrease pain and swelling and increase range of motion at the knee and ankle. At five weeks post injury substantial improvements have been observed. Pain has decreased from 9/10 to 1/10 in the knee and ankle, and active range of motion for knee flexion has increased to 120°. Two weeks of immobilization resulted in left side atrophy, which has been resolved with isometric and isotonic exercises. The ankle sprain has recovered to a fully functional level. **Uniqueness:** This athlete sustained substantial injuries to the knee and ankle joints as a result of one MOI. Typically, high forces and velocities, such as those in a motor vehicle accident, cause these types of injuries but this mechanism displayed fairly low forces and velocities in comparison. The presentation of the injury is also unique due to the pain pattern and remarkable sensitivity to palpation of the entire lower leg. Due to the unique presentation of these injuries, radiographic imaging was required to confirm the extent of the injuries sustained in the knee and ankle. Based on the diagnosis of an MCL sprain, it is assumed that a valgus force was applied to the knee. In addition, it can be assumed that there was an associated rotational mechanism that caused the compression of the femur on the tibia and subsequently the anterior medial tibial plateau fracture. It is interesting to note that the anterior cruciate ligament (ACL) was not damaged with the rotational mechanism, as this is the most common mechanism of an ACL sprain. **Conclusions:** It is possible for multi-joint injuries to occur in an athletic environment as a result of one MOI. Athletic movements are by nature multiplanar, and subsequently athletes are at risk for sustaining multiple injuries as a result of one mechanism. A comprehensive examination that includes radiographic imaging is necessary to rule out differential diagnoses, and should include the joints above and below the injury site so that an accurate diagnosis can be reached. **Word Count:** 539.