MULTI-LIGAMENT KNEE INJURY WITH ASSOCIATED FIBULAR NERVE INJURY IN A COLLEGIATE FOOTBALL PLAYER

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Background: A 20 year-old collegiate running back was tackled, forcing his right knee into a hyperextended position with a varus stress while his foot was firmly planted. On-field assessment revealed intense lateral knee pain and positive Lachman’s and varus stress tests. Twenty-four hours post-injury, the athlete reported to the athletic training room with an inability to dorsiflex and evert his right foot. The athlete was referred to an orthopedist who ordered an MRI. He was diagnosed with complete anterior cruciate and lateral collateral ligament ruptures, as well as a posterior cruciate ligament sprain, posterolateral corner injury, biceps femoris tendon tear, common fibular nerve injury and bone bruises of the medial femoral condyle and medial tibial plateau. EMG and nerve conduction velocity tests were completed and demonstrated an incomplete common fibular nerve injury. **Differential Diagnosis:** ACL tear, fibular head fracture, posterior lateral complex tear, PCL tear, transected common fibular nerve, tibial plateau fracture

**Treatment:** The athlete underwent ACL reconstruction via patellar tendon graft, open LCL reconstruction via anterior tibialis tendon auto graft, and posterior lateral corner and capsular repair of his right knee. Treatment of his knee followed normal ACL protocols at a much slower progression due to increased joint stiffness and pain. Post-surgery the athlete was placed in a hinged brace which was locked at 30 degrees for the first two weeks. The brace was subsequently opened 30 additional degrees every 2 – 3 weeks until week eight, when its use was discontinued. In addition to normal post-operative pain medications, the patient was prescribed Lovenox due to the possibility of blood clots with the complexity of the surgery. Treatment or his lower leg included biofeedback and Russian stimulation to the fibularis tertius and anterior tibialis muscles. He was placed in an ankle-foot orthosis during daily gait to control foot drop and an ACL valgus unloader brace for activity. This athlete has regained full function of his knee, however, he continues to demonstrate decreased sensation over the dorsal aspect of his foot and 1+/5 MMT of the anterior tibialis and fibularis tertius muscles. Additionally, he experiences intermittent neurological pain into the lateral lower leg and foot. He has been prescribed an articulated AFO to control foot drop and has been cleared to jog as tolerated. **Uniqueness:** Although ACL injuries in athletics are fairly common, the number of structures involved, as well as the fibular nerve involvement are rather uncommon. Additionally, fibular nerve injuries present challenges not typically associated with ACL rehabilitation. **Conclusion:** This case reinforces the importance of completing thorough clinical evaluations. Additionally, this case reinforces the importance of athletic trainers being creative during the rehabilitation process.