

Knee Injury – Fall

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HISTORY: A 50 year old female sustained a lower leg injury while running. She tripped on an uneven piece of sidewalk, felt a pop, and fell. At that time she went to the local hospital and she was found to have a left fibular head fracture, she was placed in a knee immobilizer, walking boot, and given oxycodone. She was seen in our clinic for follow-up 10 days later. At that time she was complaining of numbness/tingling as well as weakness in her foot and toes. She reported that she was unable to bear weight and unable to move her foot. The patient had no prior history of lower extremity injuries.

PHYSICAL EXAMINATION: Left lower leg – knee - positive swelling and ecchymosis about the left lateral leg, tender to palpation over lateral joint line and fibular head. Knee decreased ROM secondary to pain. Positive varus stress test, equivocal Lachman's, positive posterior drawer. Strength – difficult to assess in knee secondary to pain. Foot limited ROM with no dorsiflexion. Strength in foot – 3/5 plantarflexion, 0/5 dorsiflexion. Sensation – no tactile sensation over dorsum of foot. Dorsalis pedis 2+, skin warm

DIFFERENTIAL DIAGNOSIS: 1.) fibular head fracture with peroneal nerve injury 2.) PCL and LCL tear

TESTS AND RESULTS: 1.) Left knee x-ray – comminuted avulsion fracture of proximal fibula 2.) MRI without contrast left knee – (a.) Acute avulsion fracture of the lateral tibial rim cortex with subjacent reactive marrow edema and avulsion of the lateral capsular ligament suggestive of a Segond fracture. At least high-grade partial tearing at the femoral attachment of the ACL. (b.) Acute avulsion fracture of the fibular head tip with the dominant fragment displaced 2.3 cm superiorly. Full-thickness tear of the fibular collateral ligament with a large hematoma. (c.) Nondisplaced trabecular fracture of the anterolateral medial femoral condyle with extensive reactive marrow edema. (d.) The peroneal nerve is thickened and edematous compatible with nerve injury, no evidence of complete transection of the nerve.

FINAL/WORKING DIAGNOSIS: ACL tear with proximal fibular head fracture and peroneal nerve injury

TREATMENT AND OUTCOMES: 1.) ACL reconstruction with allograft, LCL and posterolateral collateral ligament repairs and peroneal nerve neurolysis. 2.) A course of physical therapy. 3.) Patient's pain improved but foot drop persisted at 5 month follow-up. 3.) Referred to fracture liaison of the strong bones program for the fragility fracture.