DIAGNOSIS OF A 23 YEAR OLD MALE DIVISION III GYMNAST WITH A FIBULAR HEAD FRACTURE, BICEPS FEMORIS TEAR AND LCL TEAR

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Background Information: This case presents a 23 year old male gymnast who is 70" tall and weighs 150 pounds competing in NCAA Division III. The patient has a history of ankle and knee instability. While practicing his floor routine the patient fell to the floor and complained of pain on the lateral side of his left knee. Initially, he was able to partially weight bear on his left leg. During examination, an enlarged area around the fibular head was found and the patient was referred to the physician on site. Upon evaluation varus testing was positive for laxity and pain. The posterior dial test was positive for laxity at 45° on the left knee. The physician referred the patient for imaging. Differential Diagnosis: LCL rupture, lateral meniscus tear, dislocation of the fibular head, fibular head fracture, biceps femoris tear. Treatment: Imaging revealed a fracture of the fibular head and LCL tear. The patient was scheduled for surgery three days post injury. The biceps femoris was originally torn during injury but was not discovered until surgery. Meniscectomy was performed and the biceps femoris and LCL were anchored to the fibular head, which was then pinned for healing. After surgery the patient was restricted from weight bearing for one week. The rehabilitation process began after the physician examined the knee and confirmed that all structures were intact and healing. The patient began with range of motion exercises for knee flexion and extension with an expected return to participation in 6-8 months. Next the patient was given a closed chain exercise program to assist with strengthening of the quadriceps and hamstrings. The patient was then progressed into more functional linear and lateral exercises. The patient completed this rehabilitation process from January to March and competed on March 17th after two weeks of full practice. This rapid return to play was due to the patient’s aggressiveness and compliancy. Uniqueness: The patient displayed no signs of radiating pain to suggest fibular head fracture or damage to the biceps femoris. The enlarged area around the fibular head suggested a dislocation rather than fracture. The complexity of the injury including damage to all three structures creates a uniqueness in his ability to weight bear immediately post injury. Conclusion: This case displays the importance of early detection of a fracture and the value of surgical intervention. The immediate referral to the physician allowed the patient to be moved through the hospital system quickly and begin the rehabilitation process. Surgical intervention was required for the repair to the damaged ligaments, but the rehabilitation process was vital in regaining the patient’s range of motion and strength which in turn allowed the patient to return to play quickly and safely.

Word Count: 449