

TACSM Abstract - Clinical Teaching

Jones Fracture

PRYSTYN COVINGTON

Biology 1; Vanguard College Preparatory School; Waco, TX

Category: High School

Advisor / Mentor: Mccown, Michaela(michaela_mccown@vanguard.org). Boone, Corbett(Sportsmeddoc@me.com).

Clinical Presentation & Exam: The Jones typically manifests in the patient's history in one of two ways: the fracture occurs at a specific point in time or the pain appears due to repetitive stress on the fifth metatarsal in a region known as the metaphyseal-diaphyseal junction. Sudden pain at the base of the fifth metatarsal will have appeared within 1.5 cm of the tuberosity. Patients will have trouble bearing weight on the foot with possible ecchymosis and/or edema present and will start to notice gradual pain on the opposite side of the foot as well as noticeable swelling. Patients are usually able to correlate the pain back to an incident where laterally directed force on the forefoot has occurred during plantar flexion of the ankle (typically this occurs during basketball or football). **ANATOMY & PATHOLOGY:** The fifth metatarsal(s) are the long bones in the middle of the foot, each having a neck, base, and shaft. The last bone on the foot is where most fractures of the fifth metatarsal occur usually by the base. The metaphyseal-diaphyseal region is the portion of developing long bone between the shaft (diaphysis) and the growing portion of the bone (epiphysis). **DIAGNOSTIC TESTING & CONSIDERATIONS:** After receiving the Jones fracture, the patient will have to undergo a physical exam. Usually the fracture can be picked up on an x-ray but sometimes the patient might need to do an MRI/bone scan. **TREATMENT & RETURN TO ACTIVITY:** Depending on the severity of the fracture and an individual's athleticism, there are many ways to treat the Jones Fracture. Jones Fractures heal with rest, but because these fractures occur due in the part of the bone that receives low blood supply, healing takes a long time. Surgery is recommended, particularly to athletic individuals, because the fracture may reoccur. The surgical option includes placing a plate, rod, or intramedullary screw in the fifth metatarsal of the foot. If surgery is not chosen, there are other ways to treat the Jones Fracture. Crutches and protective boots can be worn to reduce the weight and stress on the foot since Jones Fractures occur due to a repetitive stress to the injured area. While a patient can walk in a WBAT boot for 4-6 weeks, patients may need to lean towards surgery. X-rays should be taken every week or biweekly to confirm that the fracture is healing and ensure there was no nonunion. Surgery is the fastest way to return to normal activity; if the boot is used recovery will take a couple months. The fracture can reoccur so light activity is recommended if the patient wears the boot.



