

Dr. Milap S. Patel

Dr. Anish R. Kadakia

Jones Fracture



The fifth metatarsal is one of the foot bones on the side of the foot. This bone is commonly injured from twisting injuries and sports. The bone has three distinct areas where fractures occur, the base (towards the ankle), junction of the spongy bone and hard bone (Jones fracture), and the area more towards the toe (dancer's fracture). Not all fractures of the fifth metatarsal require surgery - in fact, most fractures (base and dancer's) very rarely require surgery. However, because of the anatomy of the 5th metatarsal in relation to the blood flow to the bone - the fracture commonly termed a Jones fracture has a more difficult time healing. Additional reasons for difficulty healing include the shape of the foot (high arched/cavus) or a C shaped foot (metatarsus adductus). Mechanically, feet with these shapes place increase stress on the side of the foot, making it more susceptible to fracture and increases the difficulty of healing.

Patients will describe a sudden onset of pain along the side of the foot after a twisting event or minor fall in most cases. This is consistent with a new injury where the bone was normal before. In other situations, patients may have pain with activity prior to a sudden increase in pain during activity. In these cases, there may be some long-standing changes with the bone associated with a failure of the chronically stressed

bone. This distinction is important to make as patients who have the long-standing pain typically will need surgery. The shape of the foot and heel is examined to determine if there is a high arched or C shaped foot. The location of the pain and any additional sites of pain or swelling are examined to ensure no other injuries have occurred. Xrays will be taken to identify the location of the fracture as this is very critical to making a decision on the need for surgery. Signs of long-standing pain and any deformity of the foot is reviewed as well.

Treatment of a Jones fracture is dependent on many factors, age of the patient, level of activity, shape of the foot, chronic changes to the bone (thickening of the bone), and medical condition of the patient. Jones fractures that occur suddenly do have the ability to heal with surgery in many patients, but this does require patience as the use of a boot without putting weight on it is required, followed by the use of a boot with weightbearing. Xray evidence of bone healing can take up to 6 months and if it has not healed by that point and the patient still has pain surgery may be required. In athletes, active patients or patients with mechanical overload surgery is considered to expedite the healing and improve the chance that the fracture heals overall. Despite surgery, the fracture still cannot heal or can even re-fracture. In each patient, we evaluate the need for adding your own mesenchymal signalling cells ("stem cells") to aid in fracture healing. Following surgery, weightbearing is allowed in a boot at 2 weeks, which can be a factor in choosing surgery for patients.