

Avulsion Fracture of the 5th Metatarsal Base

How and What?

- 5th metatarsal avulsion fractures occur when the ankle is rolled to the inside (Figure 1) often after the person steps on uneven terrain or lands awkwardly from a height.
- The mechanism is similar to that which causes an ankle sprain
- Pain, and swelling in the outside mid-portion of the foot are the main symptoms.
- The injury occurs when a strong ligament or tendon pulls off a fragment of the 5th metatarsal bone (base of the bone that the little toe is attached to).

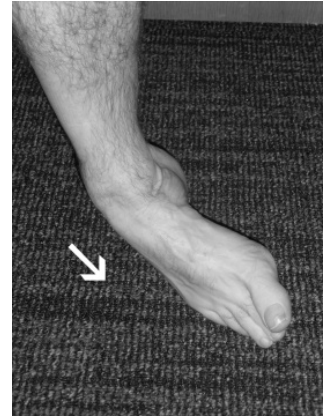


Figure 1:
Mechanism of Injury

Symptoms

5th metatarsal avulsion fractures cause marked pain and swelling in the outside and mid-part of the foot (Figure 2). Individuals will have pain and great difficulty bearing weight on the injured extremity and if they can walk at all it will usually be with a marked limp.

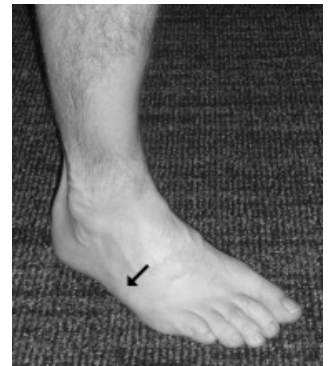


Figure 2:
Main area of Pain

X-Rays

X-rays of the foot will demonstrate a fracture at the base of the 5th metatarsal (Figure 3)

Recovery

Dancer's Fractures can be a frustrating injury as recovery can be prolonged. A typical recovery includes:

- 3-6 weeks of relative immobilization in a cast or walker boot. This may include a period of non-weight bearing for comfort, then walking as symptoms permit in the boot.
- After 4-8 weeks walking in a stiff-soled shoe is permitted.
- For most patients 75% of the recovery will occur in the first 10 weeks, but a full recovery often takes 6-12 months

Treatment

- Initial treatment includes R.I.C.E. (Rest, Ice, Compression, Elevation) and immobilization in a cast or cast boot
- Weight-bearing is limited until adequate fracture healing has occurred
- Surgery is usually not required except if the fracture is significantly displaced, or the fracture fails to heal (non-union).
- A 5th metatarsal avulsion fracture has been referred to as a “Dancer’s fracture” although more commonly “Dancer’s fractures” are spiral fractures of the 5th metatarsal shaft that were first described in dancers.



Figure 3: 5th metatarsal
avulsion X-Ray