

# FREIBERG INFRACTION

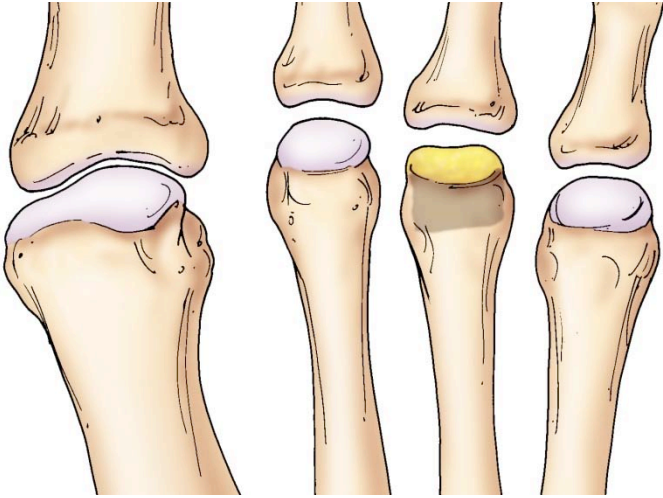
Freiberg's disease (or infraction) is a condition of the second or third metatarsal head. It is more common in adolescent girls from ten to fourteen years of age who frequently present with a limp of several months duration. They complain of pain, tenderness and swelling around the affected metatarsal head that worsens with athletic activity and is often relieved with rest. Some complain of stiffness in the joint. Trauma, repetitive stress, high heeled shoes and vascular abnormalities have been proposed as the cause of Freiberg's disease but the exact reason remains unknown.



Physical examination typically reveals swelling, tenderness and limitation of range of motion over the affected joint of the foot. X-rays show “flattening” of the normally rounded joint surface of the metatarsal head with occasional “collapse or crumbling” of the bone. MRI or bone scan may be helpful for further evaluation and treatment.

The goal of therapy is to allow inflammation and mechanical irritation to resolve. Many patients just require simple advice about avoidance of certain activities, use of shoe inserts and shoe wear modification. For others, a prolonged period of decreased weight bearing with a removable boot, a custom shoe insert or a cast may provide pain relief. Occasionally surgery may be offered to those who have severe pain that fails to respond to immobilization and anti-inflammatory medication(s).





In most adolescents the metatarsal head bone appears to improve with prolonged immobilization. In particularly painful conditions, the area of damaged bone may be removed and replaced with a bone graft or other corrective surgery. In general the prognosis is favorable once the x-rays have improved.



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