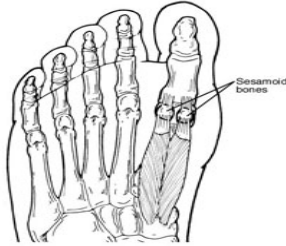


Sesamoid Injuries in the Foot and Turf Toe

A sesamoid is a bone embedded in a tendon. Sesamoids are found in several joints in the body. In the foot, the sesamoids are two pea-shaped bones located in the ball of the foot, beneath the big toe joint



Acting as a pulley for tendons, the sesamoids help the big toe move normally and provide leverage when the big toe “pushes off” during walking and running. The sesamoids also serve as a weightbearing surface for the first metatarsal bone (the long bone connected to the big toe), absorbing the weight placed on the ball of the foot when walking, running, and jumping.

Sesamoid injuries, which can involve the bones, tendons, and/or surrounding tissue in the joint are often associated with activities requiring increased pressure on the ball of the foot, such as running, basketball, football, golf, tennis, and ballet. In addition, people with high arches are at risk for developing sesamoid problems.

Types of Sesamoid Injuries in the Foot

There are **three** types of sesamoid injuries in the foot:

- **Turf toe:** Injury of the soft tissue surrounding the big toe joint. It usually occurs when the big toe joint is extended beyond its normal range. Turf toe causes immediate, sharp pain and swelling. It usually affects the entire big toe joint and limits the motion of the toe. Sometimes a “pop” is felt at the moment of injury.
- **Fracture:** A fracture (break) in a sesamoid bone can be either acute or chronic:
- **Sesamoiditis:** An overuse injury involving chronic inflammation of the sesamoid bones and the tendons involved with those bones. Sesamoiditis is caused by increased pressure to the sesamoids. Often, sesamoiditis is associated with a dull, longstanding pain beneath the big toe joint. The pain comes and goes, usually occurring with certain shoes or certain activities.

Treatment:

Non-Surgical Approaches for sesamoid injuries of the foot may include one or more of the following options:

- **Padding, strapping, or taping:** A pad may be placed in the shoe to cushion the inflamed sesamoid area or the toe may be taped or strapped to relieve that area of tension.
- **Immobilization and non-weightbearing:** The foot may be placed in a cast or removable walking cast.
- **Oral medications:** Nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen, are often helpful in reducing the pain and inflammation.
- **Physical therapy:** Range-of-motion, strengthening, and conditioning exercises and ultrasound therapy.
- **Steroid injections:** In some cases, cortisone is injected in the joint to reduce pain and inflammation.
- **Orthotic devices:** Custom orthotic devices to balance the pressure placed on the ball of the foot.

Surgical Approaches are reserved for the most severe sesamoid injuries which fail to respond to non-surgical treatment over a long period of time.