

Foot Bone Bruising

People often think about a black-and-blue mark on the surface of the skin whenever they hear the word bruise. But this is typically a superficial bruise, and bone bruising is more severe. Bone bruises are injuries to the medullary portion of the bone, which contains fibrous tissue. When compared to a bone fracture where the entire trabeculae is broken, only a few are actually injured in bruising. It is often described at this stage before a fracture occurs. Bone bruises can occur in the knee bone, wrist, foot, heel or hipbone.

Foot Bone Bruising Anatomy

Depending on the bone area involved, three different types of bruising exist, which are that of a subchondral bruise, interosseous bruise and sub-periosteal hematoma.

A subchondral bruise occurs between the cartilage and the bone underneath of it, which causes the cartilage to separate from the bone and cause bleeding in-between.

An interosseous bruise involves a high compressive force that has been repeatedly inflicted onto the bone, which causes bleeding inside of the bone where the marrow is at, which can cause a bone bruise. This often occurs in the ankles and the knees of professional football and basketball players.

A sub-periosteal hematoma occurs when the bone with a thin covering has a direct force that caused an injury with bleeding underneath of that covering.

How is a Bone Bruise Diagnosed?

A bone bruise is usually diagnosed by clinical history. The key differentiation is between a bone bruise and a stress fracture. Sometimes it can be hard to tell if the bone is bruised or there is simply a stress fracture. They present with similar findings of tenderness to touch, and pain on walking or running.

You should rule out any fractures by taking a visit to the doctor for any testing. One way is to have an X-ray, but even more sensitive is an MRI scan. Clinical history can also reasonably accurately give an idea as to whether the problem is caused by bone bruising or fracture, or a muscle or ligament injury.

Bone bruising is most commonly seen in runners, and other sports people. Its unusual to see a patient with bone bruising who has done little in the way of physical activity. Sometimes trauma can cause bone bruising, such as a sprained ankle, or twisted knee.

How to Treat Foot Bone Bruising:

1. Rest

You need to rest the injured bone or joint and avoid placing undue stress that might interfere with the healing process. Rest is not easy to achieve when you need to walk so there are a some strategies...

- I. Do not take unnecessarily long walks.
- II. Exercise off weight-bearing such as swimming or cycling.
- III. One or two crutches can offload the foot.



2. Ice

Apply ice or an icepack wrapped in a thin cloth to the injured site to help prevent any pain and inflammation.

3. Anti-Inflammatory Medication

Taking an anti-inflammatory medication can help to reduce any pain and inflammation, which might last up to a month. Everything from ibuprofen, piroxicam and diclofenac to NSAIDS can help to relieve pain. It is imperative that you take the proper dosage of the medication, preferably along with a meal, to help avoid any common side effects. You should discuss this with your pharmacist or GP.

4. Brace

You want to avoid placing any excessive stress on the bruised area to allow it the time it needs to heal properly. Bone bruises heal a lot slower than any soft tissue damage will. To help protect and support the bone near the trauma site, trying using a brace.

Tips:

- Arnica cream can help with reducing bone bruising.
- Twisting injuries can cause bruising on the knees and ankles. When you twist a joint, it causes the bones to collide with one another forcibly, which leads to the bruise.
- Any type of direct impact to the bone brought on by an accident can cause bruising.
- For those who participate in sports, extensive falling and coming into contact with hard objects and players can cause bruising.
- Wear proper sports gear when participating in sports activities.
- Bruising is often the result of a repetitive force causing an excessive amount of pressure on the bone and causing it to break or fracture.