

Knee Bone Bruising

People often assume that a black-and-blue mark on the skin is relative to a bruise. This is a superficial bruise and quite different to bone bruising where the bruising goes right into the bone.

Bone bruises are injuries involving the medullary bone, which is composed of the fibrous tissue. When compared to a bone fracture where all of the tissues of a portion of the bone are broken, only a few parts of the tissue are injured in bruises. This is the stage before a fracture actually occurs in the bone.

Bones bruising most often occurs in the medial femoral condyle or lateral femoral condyle, but can also occur in the medial condyle and lateral condyle of the tibia.

Bone bruising usually occurs from direct trauma. It can also occur subsequent to twisting the knee and injuring the anterior cruciate ligament, or with a medial meniscus tear. Sometimes bone bruising can occur following surgery too.

In rare cases, bone bruising just happens for virtually no reason. The patient might report that they have knee pain that's unrelenting on weight bearing, and when they end up having an MRI scan, bone bruising can be seen.

Sometimes bone bruising is related to another problem called an "osteochondral lesion" or other names for the same thing are osteochondral cyst, or osteochondral defect. The literal meaning is osteo (bone) chondral (cartilage), so it's a cyst or defect of the bone that occurs in the cartilage and bone.

People often think bone bruising will heal quickly, but they are usually wrong, it takes around 3-6 months for bone bruising to heal and it can be very painful. If there is an osteochondral lesion, it might take longer.

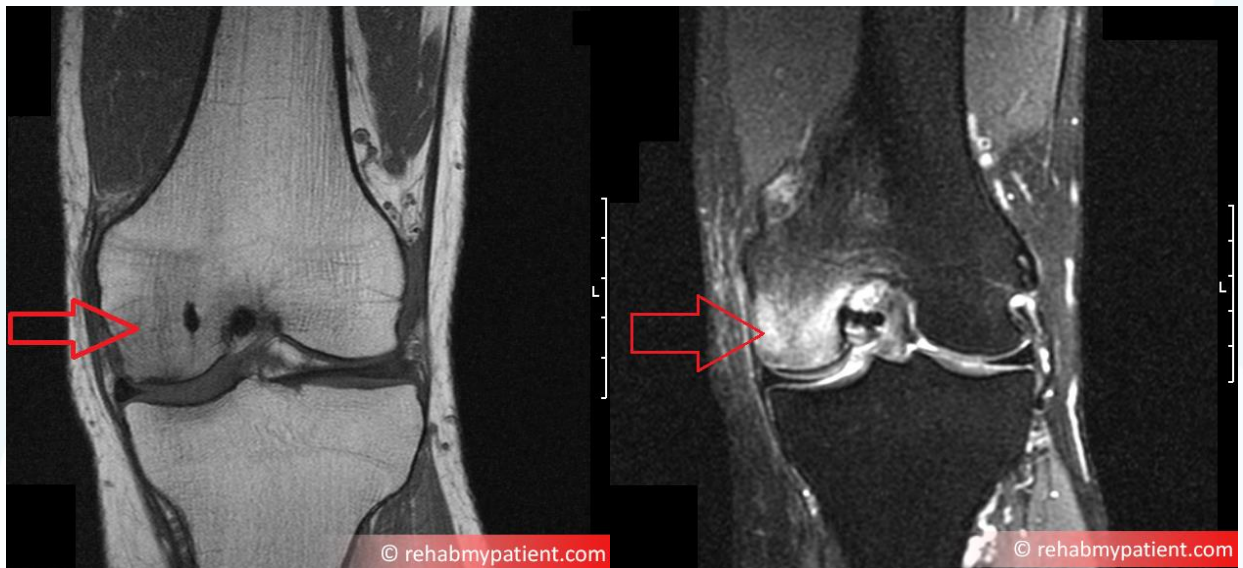
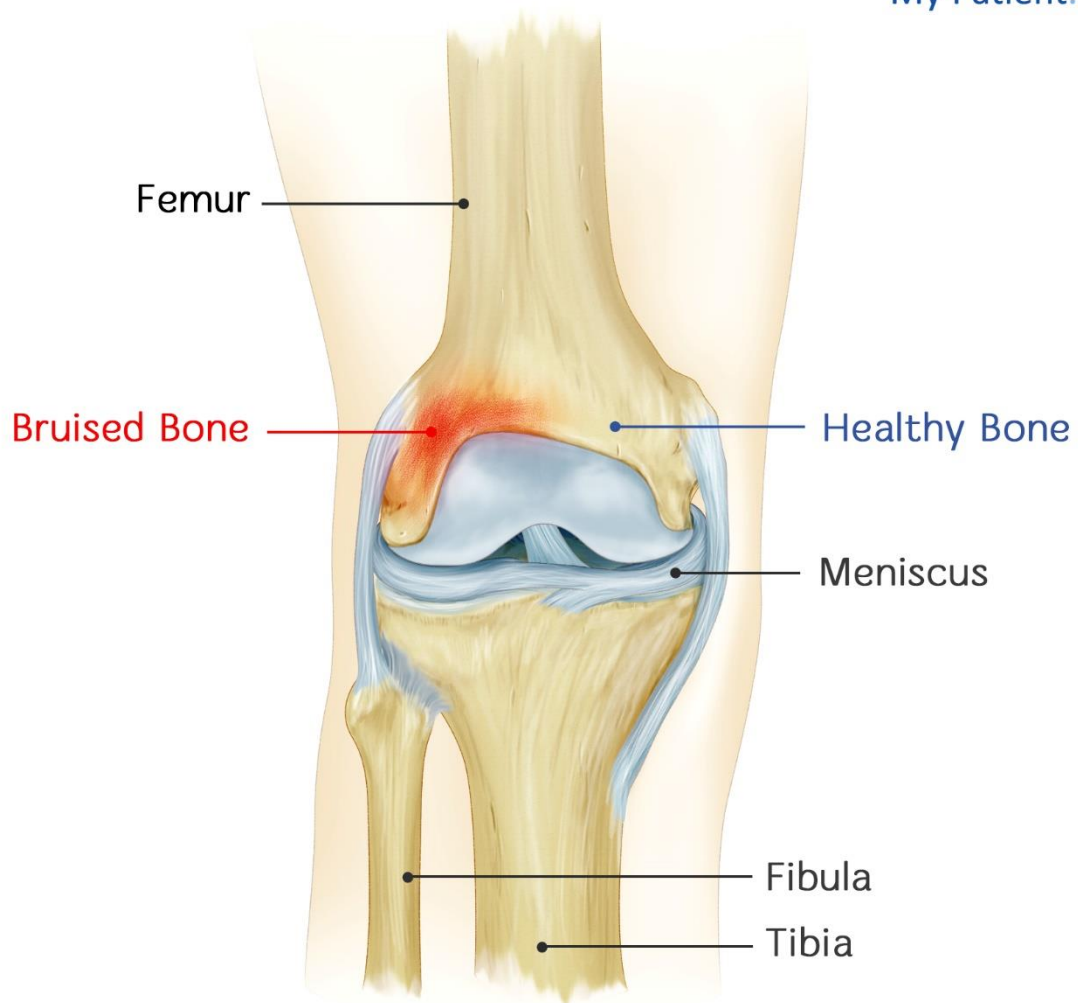
Knee Bone Bruising Anatomy

The knee is one of the biggest and one of the most complex of all joints found in the body. It joins the shin bone (tibia) and the thigh bone (femur) together. The smaller bone running alongside of the tibia (known as the fibula) and the kneecap (patella) are the two other bones that complete the knee joint. Where the tibia and femur meet, there are two parts of the bones called the condyles. The inside part is known as the medial condyle, and the outside part the lateral condyle. They occur on the tibia as well as the femur. This is where the knee joins together to form the knee joint.

Tendons keep the leg muscles and knee bones connected to enable the knee joint to move. Ligaments join all of the knee bones and deliver stability to the knee.

The anterior cruciate ligament is the one that prevents the femur from sliding backward along the tibia. The medial and lateral collateral ligaments make sure the femur doesn't slide from one side to the other. It is the posterior cruciate ligament that prevents the femur from sliding forward along the tibia.

Knee Bone Bruising



Two MRI scans showing bone bruising

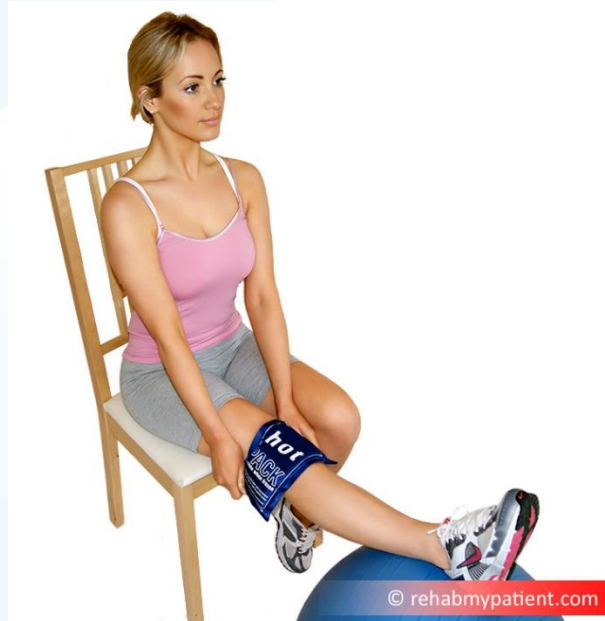
How to Treat Knee Bone Bruising:

1. Rest

After the bruise has been diagnosed using an MRI, you want to rest the bone or joint involved. Avoid placing any heavy weight bearing through the knee or any stress that might slow the healing process down. It is fine to walk gently, but running or jumping is not recommended. Sometimes the consultant might even recommend the use of crutches to off-load the joint.

2. Ice

Apply ice to the affected area using ice for 5-10 minutes at a time three to five times per day. Wrapping the ice with a thin cloth and applying it to the affected area will help to prevent pain and swelling. Ice will help to reduce any inflammation.



3. Anti-Inflammatory Medication

An anti-inflammatory medication will help to reduce pain and inflammation in the area, which can last for longer than a few weeks at a time. It is important that you take these medications at their proper dosage, preferably when eating, to avoid any of the common side effects with the medication. Discuss the pros and cons of anti-inflammatories with your therapist or doctor before taking them as they really are better as a short term solution.

4. Brace

You want to avoid placing more stress on the bone area to provide it with the time needed to heal. Bone bruising heals slower than soft tissue damage. To protect and support the bone close to a joint from additional trauma, you can wear a brace to aid in the healing process.

Tips:

- When playing sports, make sure you have proper gear on to protect your knees during the activity.
- Twisting the knee joint can cause the bones involved to collide with one another with an undue amount of force.
- Car accidents, falls or blunt forces can cause a bruise to form on the affected area.
- A bruise is often the direct result of repeated forces damaging the area that aren't strong enough to fracture the bone.
- Try rubbing some arnica cream to the affected area, it is meant to be good for bruising. Good nutrition is also important to speed up bone repair. Maintaining recommended daily dosages of calcium and vitamin D is advised, but you should discuss these options with your therapist.