

Tibial Plateau Fracture

A tibial plateau fracture is one that occurs at the top part of the shin bone. It involves the knee joint's cartilage surface. Since these fractures often occur around the knee, they have to be treated differently than that of a tibial shaft fracture. Whenever a fracture occurs around the surface of a joint, the joint is susceptible to developing arthritis from the injury. Even if the cartilage surface and the bone are perfectly lined up, there is still a strong chance that arthritis could set in due to the damaged cartilage cells.

Tibial Plateau Fracture Anatomy

The tibia is the main bone in the lower leg. It sits next to the fibula which acts as a strut or support. The tibia forms the knee joint. On the opposite side of the tibia is the femur, or upper leg bone. This forms the femoral plateau at the knee joint.

The tibial plateau is lined by cartilage and on top of the cartilage sits a c-shaped cushion known as a meniscus. The menisci, cartilage, and plateau are all susceptible to injury, but meniscus injuries are by far the most common.

How to Treat a Tibial Plateau Fracture:

1. Non-Displaced Fractures

Non-displaced fractures are when the cracks in the bones are seen on a normal x-ray, but the bones are still in proper alignment and position. Most of these fractures can easily be treated without having to worry about surgery, but they often require about three months of protection from walking.

Some of these fractures are prone to displacement in the days or weeks after the injury occurred, so they have to be watched closely by a surgeon. If the bones end up displaced, surgery might be required to get the bone fragments back into alignment and hold them there.

Tips:

- To help promote the healing process, the knee has to be protected from any weight bearing during the early stages and then gentle weight bearing can occur. Your RMP therapist will guide you on when you should start to put some weight through the joint.
- Listen to the advice of the medical professional in relation to how long you need to allow the bone to heal.
- Your doctor or physio will let you know when the best time to begin moving the knee is to help prevent any stiffness from setting in.
- Healing can take around 3-6 months.
- Use crutches in the early stages until weight bearing becomes comfortable.