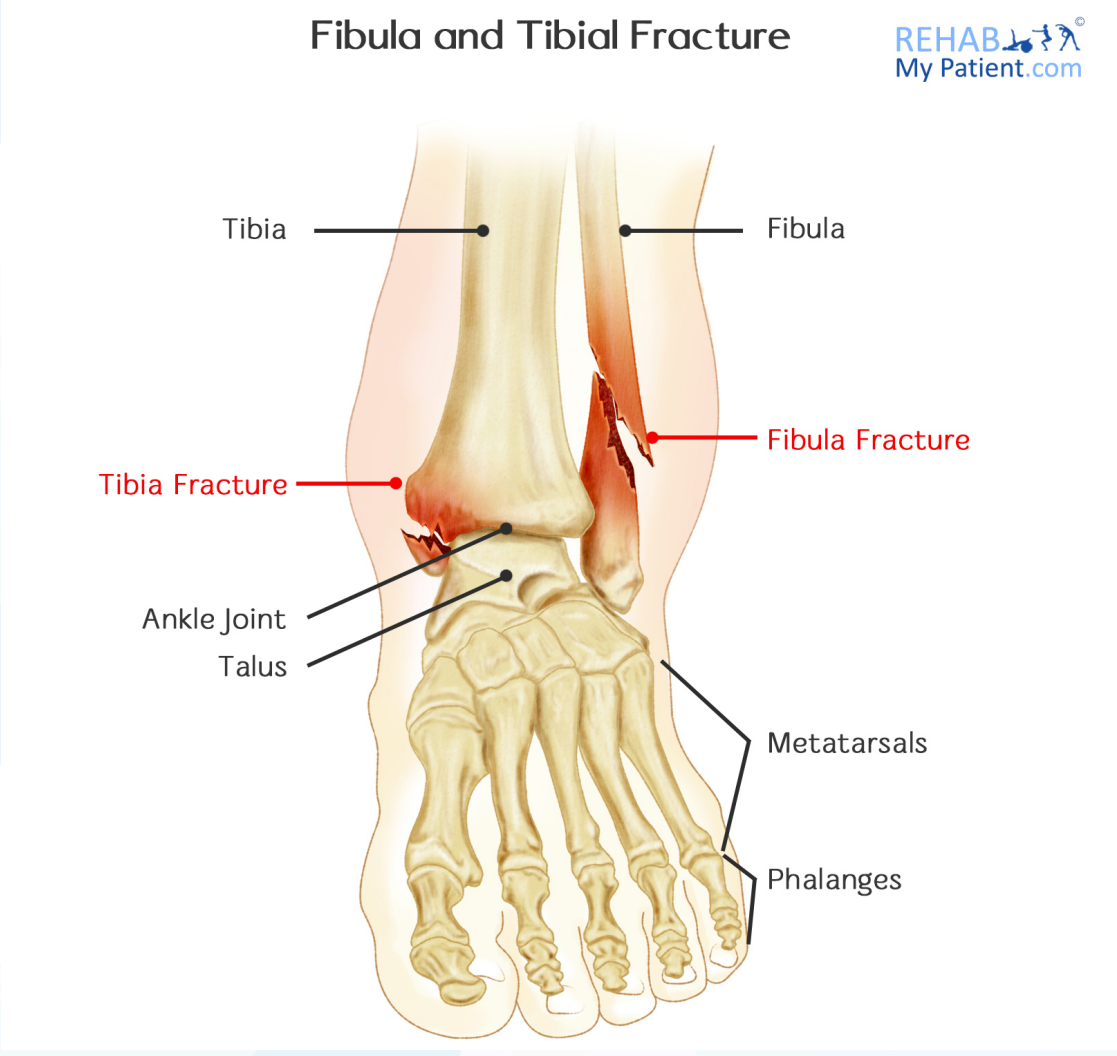
Tibia and Fibula Fracture

Broken legs are commonly caused by motorcycle accidents, but they can also occur in football or other contact sports. In cases of sports injuries, the fractures often occur from a strong twisting force when the foot is in a fixed position and an opponent delivers a direct blow. Depending on the injury mechanics, the pattern of fracture might be different. Another cause might be kicking, for example in martial arts, or from putting a lot of force through the legs such as during a vault in gymnastics. Any tibial fracture is classified as a medical emergency and requires hospital treatment promptly.

Tibia and Fibula Fracture Anatomy

The leg is the lower limb within the body responsible for supporting the body when standing. It provides you with the ability to walk, jump, run and engage in any number of other movements. The leg extends from the hip joint all the way to the ankle, which includes the largest of all bones in the body. There are five sections that make up the leg: knee, upper leg, lower leg, foot and ankle.

About 20 muscles exist in the lower part of the leg. They do everything from helping to raise the lower leg to wiggling the toes. Many of the muscles that power the movement in the foot begin as high as the back part of the knee and extend all the way down to the foot.



The lower part of the leg is composed of two different bones: the fibula and the tibia. The tibia is the larger bone of the two. It is responsible for supporting the majority of your weight and plays a key role in your ankle and knee joint.

The tibia and fibula can fracture in a number of positions, most commonly at the ankle causing an ankle dislocation, or otherwise at the mid-shaft. All of these injuries are serious. An ambulance will take you to hospital, where the leg is x-rayed, and usually surgery is performed.

How to Treat a Tibia and Fibula Fracture:

1. **Casting**
   Depending on the severity of the fracture and how close the bones are together, the two pieces can be joined together and a plaster cast can be used to immobilize the injured site. Patients are often admitted to the hospital to monitor how tight the cast is, as well as the amount of pressure being placed on the leg. Expect to spend 12 to 16 weeks in a cast allowing the bone time to heal.

2. **Rehabilitation**
   After surgery, or after the cast is removed, you will go through a rehabilitation program to help restore movement and strength that was lost during the period of immobilization. Rehabilitation can be extensive but it is necessary for those wishing to get back to playing sport.

3. **Surgery**
   If the bone fragments were displaced or splintered, or the fracture is open, surgery might be the only option to fix the fracture. A screw and plate will be used to position the bones in proper position to promote healing and prevent movement in the fractured pieces.

Tips:

- Try wearing a removable lightweight plastic walker instead of using a traditional plaster cast to help make the healing process easier, as long as you are able to do so, and under guidance from your consultant.
- Full recovery takes about 1 year, so refrain from jumping back into any sporting activities too quickly.
- Use ice to reduce inflammation. Ask your RMP therapist for guidance.
- Swelling will go into the leg, foot and ankle. When it is safe to do so, maintain gentle mobility of the ankle.
- Follow the exercises as advised by your therapist.
- A six-week or twelve week x-ray following surgery is recommended.