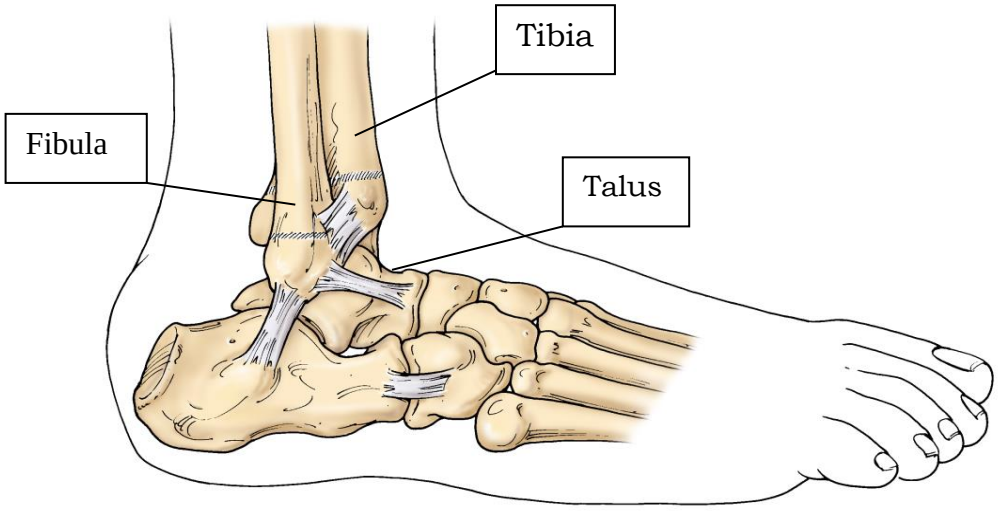
Ankle Injury



The ankle joint consists of three bones: the tibia, fibula, and the talus. The shape of these three bones and the way that they fit together allows the foot to move up and down freely. It does not however allow the foot to hook inwards or outwards very much.

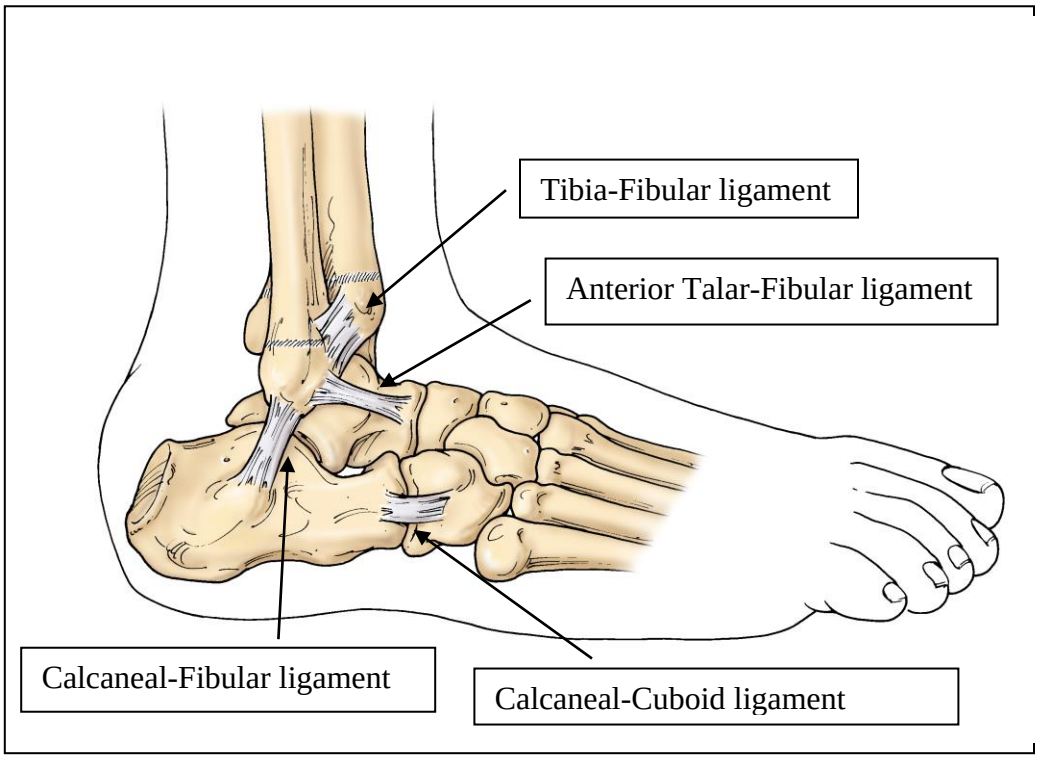
The talus is held in place between the tibia and fibula by the contours of the ends of the bones and the ligaments that hold the bones together. The ligaments allow the talus to move up and down but resist twisting inwards and outwards. At the lower end of the tibia and fibula are the growth plates. The growth plate is a thin layer of gristle that slowly lengthens and enlarges the bone by creating new bone cells.

Depending on the age of the patient, the area that is damaged in an ankle injury is usually either the growth plate or the ligaments.

In most children and teenagers, when the foot is quickly twisted down and inwards, the fibula growth plate fractures and pulls apart. There is moderate pain, and decreased range of motion. There is exquisite swelling and tenderness to touch

around the growth plate. Your physicians favor immobilization, protected weight bearing, and decreased activity level for healing to occur.

After the growth plate has completely closed at 12-16 years of age, the ligaments may be more likely to be injured. If only the distal tibial - fibular ligament is tender and swollen, the injury may be described as mild or Grade I sprain. If all the ligaments



are tender and swollen the injury is more severe and called a Grade II sprain

The treatment is tailored to promote healing of the ligament and long-term ankle stability. Immobilization for several days to weeks plus rehabilitation is part of the treatment.

No two patients are identical due to the differences in how the injury occurred and severity of damage to the ligaments or growth plate. The majority of injuries can heal properly if given an adequate time of immobilization and proper follow up.