

Skier Tibia (Leg) Fractures

In years past, the prototypical ski fracture was sustained at the lower part of the outside of the leg in the region of the ankle. However, in the past 10 years, with the advent of the modern ski boots and improvements in binding, the most commonly seen lower leg skier fracture is the tibia (or shinbone) fracture.

10% of these fractures are associated with a collision. Thus, 90 % are associated with an isolated fall or noncontact type of injury, which is generally the result of binding malfunctions and inappropriate release. The most common mechanism leading to a tibia (leg) fracture is a forward fall.

Risk factors for sustaining a skier tibia fracture include: beginners or novice skiers, less than 20 years of age, higher outdoor temperatures, and increased snow depth.

Non-risk factors include ski lengths, icy conditions, and male versus female sex.

The modern ski boot very closely resembles an extremely well padded short leg cast in the treatment of many orthopaedic lower extremity fractures. It of course goes to a much higher level than the former shorter boot top-level varieties. The binding release and designs have been based on the fracture strength of the adult tibia (shin) bone at the top of the modern ski boot.

The treatment of most skier leg fractures includes a closed reduction and cast application for variable periods of time, with or without weight bearing allowed. However, severe misalignments of the bones can lead to later bony prominences that may be incompatible with snug, rigid, high fitting ski boots. Thus, be sure to contact your local orthopaedic specialist upon returning from a ski trip where you have been treated for a leg fracture.