

Tibial Pseudarthrosis

Tibial pseudarthrosis is the medical name given to tibia fractures that haven't healed properly. The tibia is the larger of the two bones in the leg. The improper bone healing is often referred to by orthopedists as a nonunion. In the majority of cases, the condition is often associated with that of neurofibromatosis, which is a type of genetic disorder that is characterized by tumors growing in the nervous system and underneath of the skin.

Tibial Pseudarthrosis 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.

How to Treat Tibial Pseudarthrosis:

1. Braces

Patients that have an anterolateral bow without having a fracture are often treated using braces throughout their childhood years. As the child ages, the likelihood of getting a fracture tends to decrease. Braces can be discarded once the child reaches maturity, but those who have tibial dysplasia will often have to be monitored throughout their entire lives.

2. Surgery

For children who have pseudarthrosis and fractures, surgery is often recommended. The most common type of procedure uses an intramedullary rod and bone graft to promote the healing process. In other instances, the abnormal part of the bone is removed and replaced with that of a healthy, vascularized bone that was taken from the fibula in the other leg. Regardless of which procedure is used, the patient is often going to need leg lengthening to help restore the growth lost within the tibia.

Tips:

- Even though there isn't one perfect technique, about 90 percent of patients will be able to heal properly using one of the aforementioned methods.
- In cases where union isn't achieved, an additional bone graft might have to be completed to correct the issue.
- If you notice a bowing in your little one's leg, you need to have this checked out by a medical professional to determine what the problem might be.

- About half of all children who are seen for bowing by an orthopedist won't have an initial diagnosis of neurofibromatosis.
- By the time children reach maturity, about 80-90 percent of them end up manifesting neurofibromatosis, so it is important that you understand the condition fully.