

## **Intoeing Due To Internal Tibial Torsion**

### **Twisting of the Shin Bone**

#### **What is internal tibial torsion and what causes it?**

One of the most common developmental problems in children is intoeing. In fact, most physicians think of intoeing and out-toeing as a normal variation of development, not as a ‘problem’ or medical condition. With time, most children’s feet will return to the normal position, without the need for treatment.

Internal tibial torsion is one cause of intoeing. With internal tibial torsion, the shin bone (tibia) is slightly twisted or rotated causing the foot to turn in. This may be due to the position your child was sitting in while in the uterus. Intoeing due to internal tibial torsion is generally most noticeable when a child begins walking.

#### **How is internal tibial torsion treated?**

Observation is the best treatment for intoeing due to internal tibial torsion. This condition generally improves gradually until about the age of 6 years. Every 6-12 months or so, you can take pictures of your child standing in front a blank wall with the legs uncovered (for example wearing a t-shirt and a diaper) and the knee caps pointing forward; you will likely notice improvement in his/her intoeing. Historically, braces, casts and special shoes were used to treat internal tibial torsion. The most commonly used brace was a pair of shoes connected by a bar. We now know that tibial torsion gets better in nearly all cases without the use of any type of special shoe, cast or brace.

#### **What if my child’s internal tibial torsion doesn’t get better?**

Most children will outgrow tibial torsion. However, in some cases, tibial torsion persists into adulthood. Teenagers and adults with tibial torsion usually don’t have any difficulty with pain or participating in sports. In fact, in one research study, high school sprinters tended to have more tibial torsion than students who did not participate in track. Very rarely, children have severe internal tibial torsion which does not improve as they grow and causes pain or difficulty with physical activities. For severe tibial torsion that does not improve by the age of 8-10 years and causes the child difficulty with walking or sports, surgery may be recommended. The surgery involves cutting and ‘untwisting’ the tibia.