

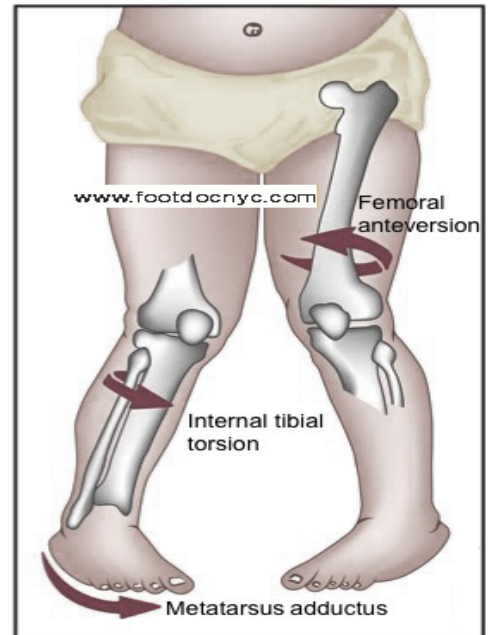
Intoeing Gait

What is Intoeing?

- Intoeing is when the child's knees and feet to turn inward. This is more commonly called a "pigeon-toed" appearance.
 - Twice as frequent in girls than boys
 - Can be hereditary

Causes:

- The three main causes of intoeing are:
 - Femoral anteversion
 - An inward twisting of the thigh bone, also known as the femur (the bone that is located between the hip and the knee). Typically seen in ages 3-6
 - Internal tibial torsion
 - Inward twisting of the tibia (shinbone) and is the most common cause of intoeing seen at age 1-2 years. Males and females are affected equally, and about two thirds of patients are affected bilaterally
 - Metatarsus adductus
 - Also known as metatarsus varus, is a common foot deformity noted at birth that causes the forefoot, to turn inward. Seen in the newborn up to 1 year old.



Signs and Symptoms:

- Signs and symptoms reported by parents/guardians include:
 - Intoeing gait in early childhood
 - Child classically sits in the "W" position
 - Knee pain associated with tibial torsion
 - Awkward running style
 - When extreme in an older child, occasional functional limitations in sports and activities of daily living can occur.
 - Difficulty with tripping during walking or running activities



Treatments:

- Conservative Observation
 - Most cases typically resolve by age 10.
 - Physical therapy for gait training
 - Bracing, inserts and sitting restrictions do not change the natural history
- Surgical Intervention
 - Surgical intervention is rarely needed
 - Typically performed in older children