



Children's Orthopedic Specialists, PC

Scoliosis and Pediatric Orthopedic Surgery

Femoral Anteversion

There are many causes of intoeing (when the feet turn inward while walking). There are some fairly common time periods in development when different anatomic sites are primarily responsible for intoeing

Birth

At birth, the most common reason for intoeing is "metatarsus adductus". This is when the feet are "C" or bean-shaped. Metatarsus adductus is usually genetically determined, though it isn't necessarily always seen in another relative. If the deformity in the foot is severe enough, casting is the treatment of choice in the first year of life. Some spontaneous correction also occurs with growth.

Walking age (1-2 years)

As children begin to walk, frequently parents and grandparents notice the tendency of a child to toe in. The most common reason for this is an inward twist of the shin bone, or tibia. This condition is referred to as "internal tibial torsion". The inward torsion is a variation of normal anatomy, and is caused partially by the child's position in the uterus. Frequently the internal twist of the bone is associated with bowing of the tibia bone, which gives the child an appearance of bowleggedness. The natural tendency is to correct with growth over time. In the past braces were frequently used for this condition, but for the most part these have now been abandoned.

Age 6-12

In children from about 6 years and older, the most common reason to notice intoeing is from a twist in the thighbone, the femur. This condition is called internal femoral torsion, or "femoral anteversion". There is quite a bit of variability of the torsional build in the femur in different children. Kids with an extreme twist in the femur tend to have more difficulty with running efficiently and sometimes trip more frequently. When walking more slowly, the deformity is less noticeable. In this age range only a small amount of correction of the twist happens with growth. Braces and physical therapy have been found to not be useful at correcting internal femoral torsion. In most instances, no treatment is required. In severe cases, occasionally surgery is warranted to create more normal bone structure.