



INTERLACHEN PEDIATRICS

A Guide to the Foot and Leg

Many parents are concerned with the appearance of their infant's or child's feet and legs, particularly when the child first begins to stand and walk. An understanding of normal development will allay some of these concerns. In the newborn, the imprint of the in utero positioning may be evident and confused as an abnormality. In utero positioning produces joint and muscle contractures and effects the torsional alignment of the long bones, especially the lower extremities. The effects of in utero positioning are, therefore, physiologic and may not resolve until 3-4 years of age. Additionally, ligament laxity, "loose joints," tends to exaggerate joint angles and is often misinterpreted as an abnormality.

Newborn's Foot

There is minimal room for movement in the uterus at the end of the pregnancy with the result being that many children are born with feet that have been maintained in a cramped position. Most of these positional deformities or problems resolve spontaneously over time or with the aid of massage. If problems are more severe, a referral is usually made to a pediatric orthopaedic physician for more aggressive management such as serial casting or surgical intervention. Baby fat covers the infant's foot and arch often gives the false appearance of the baby having flat feet. Common anomalies of the toes include "curly toes," overlapping 5th toe, and syndactyly, webbing toes. No treatment is generally necessary for these common conditions.

Infant Legs

Because of the way infants are packaged inside the womb prior to birth, all baby's legs are bowed to some extent. There is nothing to alter this physiologic deformity until the infant begins to bear weight and walk. The new forces on the bones cause the bones to remodel and self-correct over time. Torsional deformities (e.g. intoeing) of the lower extremities are also very common and generally resolve spontaneously by school age. Ligamentous laxity allows joint angles to be exaggerated, especially when an infant or child is bearing weight. This results in the appearance of "knock knees," (Genu Varum), "bowed legs," (Genu Valgum), flexible flat feet, and probation at the ankles. These findings generally resolve spontaneously over time.

Shoes

Clothing is worn for comfort, to enhance appearance and provide protection. Shoes should be selected on the same basis. Shoes are not corrective and the foot does not need support for normal activities. The foot requires mobility to function normally. It has been demonstrated that populations that are predominantly barefoot have healthier feet than those that wear shoes. The best shoes for children are those that simulate the bare foot. Shoes should be flexible, flat, nonconstricting, and made of material that breathes. Shoes do not have to be expensive.