

Flatfoot

“Mom, Dad - My Feet Hurt!”

While this is not something parents look forward to hearing, it may actually be a welcome confirmation that a flat foot problem exists. Children and adolescents often fail to communicate minor pains and discomfort with parents, and their lack of participation in physical or group activities can be mistakenly confused for laziness or disinterest. Parents, when questioned about their children’s feet, will often relate the following complaints: clumsiness, difficulty standing, foot and leg cramps or pains, refusing to walk long distances, uneven shoe wear, and tired feet. These symptoms are not normal in the developing child and act as subtle clues that allow us to determine the severity of the flat foot deformity and its effect on our child’s health and well being.

A flat foot in simple terms is one where the arch disappears when we stand. An arch, whether supporting a bridge or our feet, is an inherently stable structure that can support many times its weight by evenly redistributing the stresses placed on it. With each step we take, our weight is transferred through the arch to the bottom of our heels, the balls of our feet and finally our toes. This in turn allows our muscles freedom to work to fine tune our movements and give us a smooth walking pattern.

When we have a foot that is flat, we have a foot that is inefficient and fatigues easily. With each step, it can no longer evenly spread out our weight and we start recruiting muscles throughout our body to absorb more and more of the stress. Since they are now working overtime, the muscles get tired and may cramp. At the same time, since the feet are the foundation of our body, the joints above - at the ankle, knee, hip and spine - become involved in compensating for our poor foot structure and may themselves become affected. In fact, people with flat feet used to be rejected from joining the military, as it was known that they would get tired too easily and slow down their fellow soldiers.

There are several types of flat feet:

- 1- Flexible Flatfoot is the most common type of flat foot, where the arch appears normal when sitting but collapses when standing. It can be mild, moderate, or severe to the point where one literally will walk on the inside of his/her ankle bone. This is typically an inherited condition that begins in childhood and continues into adulthood. Left untreated it can lead to the formation of bunions, hammertoes, and heel pain. This responds most easily to treatment.
- 2- Rigid Flatfoot is a foot that is flat all the time whether sitting or standing and is also an inherited condition. This is the most difficult to treat.
- 3- Adult Acquired Flatfoot develops during adulthood as a result of injury, degeneration and stretching of the tendons that help support the arch. It results in pain, swelling, loss of arch height, and the foot may start to swing out when walking. This is a progressive deformity that worsens with time if left untreated.

Treatment of the various types of flatfoot depends on the severity of the deformity and how it limits activity. The most common treatment for mild to moderate forms of flat foot are a combination of supportive shoes and orthotics prescribed by a practitioner who is knowledgeable in performing a biomechanical and gait examination on the patient. An orthotic is a device that is molded to the patient's foot and acts to help support the arch and minimize flattening of the foot when worn in a shoe.

For the moderate to severe flatfoot, my treatment of choice is an "internal orthotic." This device is a titanium implant about the size of a thimble, which is placed between the heel and ankle bones and is able to stop the abnormal flattening of the arch while preserving the normal range of motion of the foot and ankle. This is a minimally invasive procedure which is conducted through a ½ inch incision on the outside of the foot and allows for immediate movement with return to sneakers in 2-4 weeks. The procedure has been available for over 10 years and works well in children, adolescents and adults allowing a gradual return to pain free movement and sporting activities.

It is important to note that a lack of pain does not mean that a problem does not exist. Children's feet are not subjected to the full functional demands that will be placed on them later in adulthood. The flat foot can be the source of problems for the whole body and should not be overlooked when attempting to diagnose knee, hip, or back pain. Correcting flat feet at an early age can save much trouble associated with pain, bunions, hammertoe and heel spurs later in life, and allow for greater enjoyment into adulthood.

Flatfoot Before



After Minimal Incision Correction



Adult Flatfoot Before and After Reconstruction

