

Pediatric Flatfoot

Flatfoot is common in both children and adults. When this deformity occurs in children, it is referred to as “pediatric flatfoot,” a term that actually includes several types of flatfoot. Although there are differences between the various forms of flatfoot, they all share one characteristic partial or total collapse of the arch.

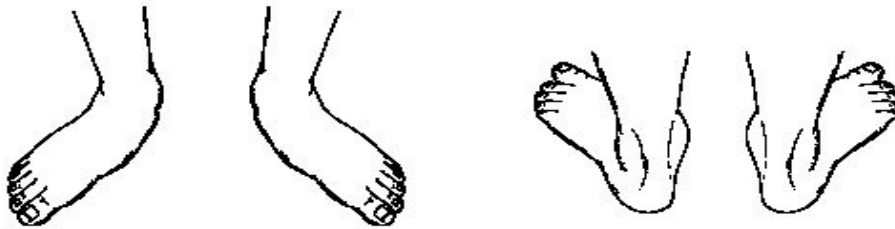
Most children with flatfoot have no symptoms, but some children have one or more symptoms. When symptoms do occur, they vary according to the type of flatfoot. Some signs and symptoms may include:

- Pain, tenderness or cramping in the foot, leg and knee
- Reduced energy when participating in physical activities
- Voluntary withdrawal from physical activities
- Outward tilting of the heel
- Difficulty with shoes
- Awkwardness or changes in walking

Flatfoot can be apparent at birth or it may not show up until years later, depending on the type of flatfoot. Some forms of flatfoot occur in one foot only, while others may affect both feet.

Types of Pediatric Flatfoot

Various terms are used to describe the different types of flatfoot. For example, flatfoot is either *asymptomatic* (without symptoms) or *symptomatic* (with symptoms). As mentioned earlier, the majority of children with flatfoot have an asymptomatic condition.



Symptomatic flatfoot is further described as being either *flexible* or *rigid*. “Flexible” means that the foot is flat when standing (weight-bearing), but the arch returns when not standing. “Rigid” means the arch is always stiff and flat, whether standing on the foot or not.

Several types of flatfoot are categorized as rigid. The most common are:

- **Tarsal coalition:** This is a congenital condition. It involves an abnormal joining of two or more bones in the foot. Tarsal coalition may or may not produce pain. When pain does occur, it usually starts in pre-adolescence or adolescence.
- **Congenital vertical talus:** Rigid “rocker bottom” appearance apparent in newborns. Symptoms begin at walking age, since it is difficult for the child to bear weight and wear shoes.

Treatment:

Non-surgical Approaches

If a child’s flatfoot is asymptomatic, treatment is often not required. Instead, the condition will be observed and re-evaluated periodically by the foot and ankle surgeon. Custom orthotic devices may be considered for some cases of asymptomatic flatfoot.

In symptomatic pediatric flatfoot, treatment is required.

- **Orthotic devices:** Custom orthotic devices that fit inside the shoe to support the structure of the foot and improve function.
- **Physical therapy**
- **Medications:** Nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen, may be recommended to help reduce pain and inflammation.

- **Shoe modifications:** Shoes which a supportive arch.
- **Activity modifications:** The child needs to temporarily decrease activities that bring pain, as well as avoid prolonged walking or standing.

Surgical Approaches

In some cases, surgery is necessary to relieve the symptoms and improve foot function. The surgical procedure or combination of procedures selected for your child will depend on his or her particular type of flatfoot and degree of deformity.