Adult (Acquired) Flatfoot

There's an easy way to tell if you have flat feet. Simply wet your feet, then stand on a flat, dry surface that will leave an imprint of your foot. A normal footprint has a wide band connecting the ball of the foot to the heel, with an indentation on the inner side of the foot. A foot with a high arch has a large indentation and a very narrow connecting band. Flat feet leave a nearly complete imprint, with almost no inward curve where the arch should be.

Most people have "flexible flatfoot" as children; an arch is visible when the child rises up on the toes, but not when the child is standing. As you age, the tendons that attach to the bones of the foot grow stronger and tighten, forming the arch. But if injury or illness damages the tendons, the arch can "fall," creating a flatfoot.

In many adults, a low arch or a flatfoot is painless and causes no problems. However, a painful flatfoot can be a sign of a congenital abnormality or an injury to the muscles and tendons of the foot. Flat feet can even contribute to low back pain.

If the condition progresses, you may experience problems with walking, climbing stairs and wearing shoes. See your doctor if:

- Your feet tire easily or become painful with prolonged standing.
- It's difficult to move your heel or midfoot around, or to stand on your toes.
- Your foot aches, particularly in the heel or arch area, with swelling along the inner side.
- Pain in your feet reduces your ability to participate in sports.
- You've been diagnosed with rheumatoid arthritis; about half of all people with rheumatoid arthritis will develop a progressive flatfoot deformity.

Diagnosing Flatfoot

Although you can do the "wet test" at home, a thorough examination by a doctor will be needed to identify why the flatfoot developed. Possible causes include a congenital abnormality, a bone fracture or dislocation, a torn or stretched tendon, arthritis or neurologic weakness. For example, an inability to rise up on your toes while standing on the affected foot may indicate damage to the posterior tibial tendon (PTT), which supports the heel and forms the arch. If "too many toes"
show on the outside of your foot when the doctor views you from the rear, your shinbone (tibia) may be sliding off the anklebone (talus), another indicator of damage to the PTT.

Be sure to wear your regular shoes to the examination. An irregular wear pattern on the bottom of the shoe is another indicator of acquired adult flatfoot. Your physician may request X-rays to see how the bones of your feet are aligned. Muscle and tendon strength are tested by asking you to move the foot while the doctor holds it.

**Treatment Options**

A painless flatfoot that does not hinder your ability to walk or wear shoes requires no special treatment or orthotic device.

**Other treatment options depend on the cause and progression of the flatfoot. Conservative treatment options include:**

- Making shoe modifications
- Using orthotic devices such as arch supports and custom-made orthoses
- Taking nonsteroidal anti-inflammatory drugs such as ibuprofen to relieve pain
- Using a short-leg walking cast or wearing a brace
- Injecting a corticosteroid into the joint to relieve pain
- Rest and ice
- Physical therapy

In some cases, surgery may be needed to correct the problem. Surgical procedures can help reduce pain and improve bone alignment.

**Types of surgery your orthopaedist may discuss with you include:**

- Arthrodesis, or welding (fusing) one or more of the bones in the foot/ankle together
- Osteotomy, or cutting and reshaping a bone to correct alignment
- Excision, or removing a bone or bone spur
- Synovectomy, or cleaning the sheath covering a tendon
- Tendon transfer, or using a piece of one tendon to lengthen or replace another

Having flat feet is a serious matter. If you are experiencing foot pain and think it may be related to flat feet, talk to your orthopaedist.