## **Weekend Doctor**

## By THOMAS F. VAIL

Q: Can you discuss flat feet?

A: Fallen arches, or flat feet, are a legitimate medical condition affecting about 5 percent of Americans. Flat feet can be present at birth or develop over decades of walking, running and overall time spent on the feet, especially on hard surfaces in the workplace

There are several types of flatfoot conditions that occur in adults. The most common type is adult-acquired flatfoot. It is caused by over-

stretching a tendon that supports the arch.

Another common type is flexible flatfoot, in which the foot is flat when standing, but returns to a normal arch in non-weight-bearing

positions. Flat feet can be very painful and make people

avoid walking, running and exercise. But if you seek medical attention early, a foot and ankle surgeon may be able to prevent it from becoming a more serious foot problem. A flat foot can actually be a tendon tear, frac-

ture, or another disorder, like Charcot neuroarthropathy, so a complete podiatric exam, including x-rays, should be done to evaluate your condition. Treatments may include modifying or limiting

activities, stretching exercises, custom shoe inserts and non-steroidal anti-inflammatory medications. If those techniques don't work, a variety of surgical procedures may be considered to relieve pain and improve foot function.

Q: Are drugstore-quality arch supports worthwhile?

A: To be truly effective, an orthotic must be fitted for your particular needs. This means that a casting or 3-D digital scan of your foot must be completed to get a true picture of your foot. Scanners at your big-box retailer only take a "pressure point" pic-

ture of your foot, not a 3-D image. A 3-D image or casting is sent to a laboratory where a custom orthotic device is fabricated to the exact specifications of your podiatrist. Your podiatrist will take into account your particular foot problems

in writing the prescription for the laboratory. A functional orthotic controls foot movement and helps a person walk in a way that best supports joints and muscles.

Wearing an ill-fitted orthotic is not only a waste of time, but it can also make your foot problems worse. Over time, these problems can

lead to leg, knee, hip, and even back problems. Store-bought orthotics tend to offer relief and comfort for only a short period of time.

Q: Other than flip flops and thongs, are there other types of shoes to avoid?

A: Any shoe that can be bent in the middle is not a good choice for someone with flat feet. This includes ballet type shoes, dock shoes and high heel pumps.

The key factors to remember are that the shoe should have stability, support and motion control. When looking at shoe reviews or technical specifications, any indication of "added support" means you are headed in the right direction.

The main technology found in stability shoes is a medial post of dual density foam. Footwear producers inject a harder compound of foam right below the medial side of the arch and sometimes extended all the way to the heel. It is easily recognizable as a darker, almost always gray, piece of foam on the inside of the midsole. Q: What exercises can be of value?

A: Three exercises that can be of value in keeping the arch healthy are the towel scrunch, stair raise for arch strength and the can roll.

With time and decreased demand, the small muscles of your arch become weaker. The muscles lose their ability to give your feet the spring they once had.

To strengthen those muscles, start with the "towel scrunch" by placing a small hand towel on the floor and reaching out with your toes to grab the towel and scrunch it back toward you, bunching it up under your foot. Keep reaching out and grabbing more towel until

you run out. At the end of each scrunch, hold the contraction you feel in the

arch for just a second before releasing. I recommend three sets daily. The toe raise can be done on a stair or raised board at least four inches from the ground. Stand on the stair with only the ball of your foot and rise up to your tiptoes, pressing down with your toes. When you lower, resist the urge to drop your heel too far below the stair or raised board. This becomes a calf exercise, and you want to focus on your arch. Do 10 of these per set and three sets a day.

Finish you arch routine with a good flexibility exercise. Sitting in your favorite chair, place the arch of your foot on a soup can, turned on its side, and, with your foot, roll it freely away and back from you from the ball of your foot to your heel. This stretches and massages

the bottom of the foot and can be a way to reduce some arch soreness. Q: What are some criteria used to determine if surgery is needed?

A: If you have had prolonged pain that is not helped with conservative methods, and your abnormal gait causes pain in other parts of your body such as your knees and back, then surgery may be your only option.

Surgery for flat feet is invasive and requires a long recuperation period, sometimes up to one year. Each individual case will be evaluated and may involve several procedures including one or more of the following: posterior tibial tendon repair, F.D.L. tendon transfer, calcaneal osteotomy, lateral column lengthening, iliac aspiration and gastroc release.

Q: At what age would surgery be appropriate?

It can be difficult to tell if a child has flat feet as the arches don't fully develop until the age of 10. Before age 3, all children have flat feet. The arch of the foot does not start to develop until about 3 years of age.

Older children may have flat feet for a number of reasons. Problems with ligaments, muscles, joints, bones, and the nervous system are all possible causes. Children with conditions such as Down, Marfan or Ehlers-Danlos syndromes are more likely to have flat feet.

These questions were posed by Vicki Daley, Findlay. Vail is with Advanced Footcare, Findlay. Questions for Blanchard Valley Health System experts may be sent to Weekend Doctor, The Courier, P.O. Box 609, Findlay, OH 45839.