that cramp the toes. Avoid pressure on the toes as much as possible. Surgery may be necessary to realign the toes to their proper position.

Heel pain can generally be traced to faulty biomechanics which place too much stress on the heel bone, ligaments, or nerves in the area. Stress could result while walking or jumping on hard surfaces, or from poorly made footwear. Overweight is also a major contributing factor. Some general health conditions—arthritis, gout, and circulatory problems, for example—also cause heel pain.

Heel spurs are growths of bone on the underside of the heel bone. They can occur without pain; pain may result when inflammation develops at the point where the spur forms. Both heel pain and heel spurs are often associated with plantar fasciitis, an inflammation of the long band of connective tissue running from the heel to the ball of the foot. Treatments may range from exercise and custom-made orthotics to anti-inflammatory medication or cortisone injections.

Ingrown nails are nails whose corners or sides dig painfully into the skin, often causing infection. They are frequently caused by improper nail trimming, but also by shoe pressure, injury, fungus infection, heredity, and poor foot structure. Toenails should be trimmed straight across, slightly longer than the end of the toe, with toenail clippers. If painful or infected, your podiatric physician may remove the ingrown portion of the nail; if the condition reoccurs frequently, your podiatrist may permanently remove the nail.

Neuromas are enlarged, benign growths of nerves, most commonly between the third and fourth toes. They are caused by bones and other tissue rubbing against and irritating the nerves. Abnormal bone structure or pressure from ill-fitting shoes also can create this condition, which can result in pain, burning, tingling, or numbness between the toes and in the ball of the foot. Conservative treatment can include padding, taping, orthotic devices and cortisone injections, but surgical removal of the growth is sometimes necessary.

Warts are caused by a virus, which enters the skin through small cuts and infects the skin. Children, especially teenagers, tend to be more susceptible to warts than adults. Most warts are harmless and benign, even though painful and unsightly. Warts often come from walking barefooted on dirty surfaces or littered ground. There are several simple procedures which your podiatric physician might use to remove warts.

This pamphlet is one of a series produced by APMA that discusses several foot health conditions and concerns, including diabetes, arthritis, athlete’s foot, warts, foot orthotics, aging, children’s feet, forefoot and rearfoot surgery, women’s foot concerns, walking, heel pain, nail problems, footwear, and others. They are not meant to be substitutes for professional advice from your podiatric physician. The pamphlets are available from many members of APMA. Or call:

1-800-FOOTCARE

American Podiatric Medical Association
9312 Old Georgetown Road
Bethesda, Maryland 20814-1698
http://www.apma.org
Foot Health

A biological masterpiece, but subject to many ills

The human foot is a biological masterpiece. Its strong, flexible, and functional design enables it to do its job well and without complaint—if you take care of it and don’t take it for granted.

The foot can be compared to a finely tuned race car, or a space shuttle, vehicles whose function dictates their design and structure. And like them, the human foot is complex, containing within its relatively small size 26 bones (the two feet contain a quarter of all the bones in the body), 33 joints, and a network of more than 100 tendons, muscles, and ligaments, to say nothing of blood vessels and nerves.

Tons of Pressure

The components of your feet work together, sharing the tremendous pressures of daily living. An average day of walking, for example, brings a force equal to several hundred tons to bear on the feet. This helps explain why your feet are more subject to injury than any other part of your body.

Foot ailments are among the most common of our health problems.

Although some can be traced to heredity, many stem from the cumulative impact of a lifetime of abuse and neglect. Studies show that 75 percent of Americans experience foot problems of a greater or lesser degree of seriousness at some time in their lives; nowhere near that many seek medical treatment, apparently because they mistakenly believe that discomfort and pain are normal and to be expected.

There are a number of systemic diseases that are sometimes first detected in the feet, such as diabetes, circulatory disorders, anemia, and kidney problems. Arthritis, including gout, often attacks foot joints first.

Specialized Care

Your feet, like other specialized structures, require specialized care. A doctor of podiatric medicine can make an important contribution to your total health, whether it is regular preventive care or surgery to correct a deformity.

In order to keep your feet healthy, you should be familiar with the most common ills that affect them. Remember, though, that self-treatment can often turn a minor problem into a major one, and is generally not advisable. You should see a podiatric physician when any of the following conditions occur or persist.

**Athlete’s foot** is a skin disease, usually starting between the toes or on the bottom of the feet, which can spread to other parts of the body. It is caused by a fungus that commonly attacks the feet, because the wearing of shoes and hose fosters fungus growth. The signs of athlete’s foot are dry scaly skin, itching, inflammation, and blisters. You can help prevent infection by washing your feet daily with soap and warm water; drying carefully, especially between the toes; and changing shoes and hose regularly to decrease moisture. Athlete’s foot is not the only infection, fungal and otherwise, which afflicts the foot, and other dry skin/dermatitis conditions can be good reasons to see a doctor of podiatric medicine if a suspicious condition persists.

**Blisters** are caused by skin friction. Don’t pop them. Apply nonprescription antiseptic and cover with a sterile bandage. If a blister breaks on its own, wash the area, apply an antiseptic, and cover with a sterile bandage.

**Bunions** are misaligned big toe joints which can become swollen and tender. The deformity causes the first joint of the big toe to slant outward, and the big toe to angle toward the other toes. Bunions tend to run in families, but the tendency can be aggravated by shoes that are too narrow in the forefoot and toe. There are conservative and preventive steps that can minimize the discomfort of a bunion, but surgery is frequently recommended to correct the problem.

**Corns and calluses** are protective layers of compacted, dead skin cells. They are caused by repeated friction and pressure from skin rubbing against bony areas or against an irregularity in a shoe. Corns ordinarily form on the toes and calluses on the soles of the feet. The friction and pressure can burn or otherwise be painful and may be relieved by moleskin or padding on the affected areas. Never cut corns or calluses with any instrument, and never apply home remedies, except under a podiatrist’s instructions.

**Foot odor** results from excessive perspiration from the more than 250,000 sweat glands in the foot. Daily hygiene is essential. Change your shoes daily to let each pair air out, and change your socks, perhaps even more frequently than daily. Foot powders and antiperspirants, and soaking in vinegar and water, can help lessen odor.

**Hammertoe** is a condition in which any of the toes are bent in a claw-like position. It occurs most frequently with the second toe, often when a bunion slants the big toe toward and under it, but any of the other three smaller toes can be affected. Although the condition usually stems from muscle imbalance, it is often aggravated by ill-fitting shoes or socks.