

## ARTHRITIS (DEGENERATIVE JOINT DISEASE)

### **What is Arthritis?**

Arthritis, in general terms, is inflammation and swelling of the cartilage and lining of the joints, generally accompanied by an increase in the fluid in the joints. Arthritis has multiple causes; just as a sore throat may have its origin in a variety of diseases, so joint inflammation and arthritis are associated with many different illnesses.

Arthritis is a frequent component of complex diseases that may involve more than 100 identifiable disorders. If the feet seem more susceptible to arthritis than other parts of the body, it is because each foot has 33 joints that can be afflicted and there is no way to avoid the pain of the tremendous weight-bearing load on the feet.

Arthritis is a disabling and occasionally crippling disease; it afflicts almost 40 million Americans. In some forms, it appears to have hereditary tendencies. While the prevalence of arthritis increases with age, all people from infancy to middle age are potential victims. People over 50 are most prone to arthritis.

Arthritic feet can result in loss of mobility and independence, but early diagnosis and proper medical care can help significantly.

### **Causes**

Besides heredity, arthritic symptoms may arise in a number of ways:

- Through injuries, notably in athletes and industrial workers, especially if the injuries have been ignored (which injuries of the feet tend to be).
- Through bacterial and viral infections that strike the joints. The same organisms that are present in pneumonia, gonorrhea, staph infections, and Lyme disease cause the inflammations.
- In conjunction with bowel disorders such as colitis and ileitis, frequently resulting in arthritic conditions in the joints of the ankles and toes. Such inflammatory bowel diseases seem distant from arthritis, but treating them can relieve arthritic pain.
- Using drugs, both prescription drugs and illegal street drugs, can induce arthritis.
- As part of a congenital autoimmune disease syndrome of undetermined origin. Recent research has suggested, for instance, that a defective gene may play a role in osteoarthritis.

### **Types and Symptoms**

**Osteoarthritis:** Osteoarthritis is the most common form of arthritis. It is frequently called degenerative joint disease or “wear and tear” arthritis. Although it can be brought on suddenly by an injury, its onset is generally gradual; aging brings on a breakdown in cartilage, and pain gets progressively more severe, although it can be relieved with rest. Dull, throbbing nighttime pain is characteristic, and it may be accompanied by muscle weakness or deterioration. Walking may become erratic. It is a particular problem for the feet when people are overweight, simply because there are so many joints in each foot. The additional weight contributes to the deterioration of cartilage and the development of bone spurs.

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**Rheumatoid arthritis (RA):** RA is a major crippling disorder and perhaps the most serious form of arthritis. It is a complex, chronic inflammatory system of diseases, often affecting more than a dozen smaller joints during the course of the disease, frequently in a symmetrical pattern—both ankles, or the index fingers of both hands, for example. It is often accompanied by signs and symptoms—lengthy morning stiffness, fatigue, and weight loss—and it may affect various systems of the body, such as the eyes, lungs, heart, and nervous system. Women are three or four times more likely than men to suffer RA.

RA has a much more acute onset than osteoarthritis. It is characterized by alternating periods of remission, during which symptoms disappear, and exacerbation, marked by the return of inflammation, stiffness, and pain. Serious joint deformity and loss of motion frequently result from acute RA. However, the disease system has been known to be active for months, or years, then abate, sometimes permanently.

**Gout (gouty arthritis):** Gout is a condition caused by a buildup of the salts of uric acid—a normal byproduct of the diet—in the joints. A single big toe joint is commonly the affected area, possibly because it is subject to so much pressure in walking; attacks of gouty arthritis are extremely painful, perhaps more so than any other form of arthritis. Men are much more likely to be afflicted than women, an indication that heredity may play a role in the disease. While a rich diet that contains lots of red meat, rich sauces, shellfish, and brandy is popularly associated with gout, there are other protein compounds in foods such as lentils and beans that may play a role.

**Psoriatic arthritis:** Psoriasis is often thought of as a skin disorder, but it can affect the joints as well. On the skin, psoriasis appears as dry, scaly patches. Not all people with psoriasis of the skin will develop joint symptoms—about one in twenty people with psoriasis will develop associated arthritis. The arthritis may be mild and involve only a few joints, particularly those at the ends of the fingers or toes. People who also have arthritis usually have the skin and nail changes of psoriasis. Often, the skin gets worse at the same time as the arthritis.

**Traumatic arthritis:** Traumatic arthritis is a form of arthritis that is caused by blunt, penetrating, or repeated trauma or from forced inappropriate motion of a joint or ligament. Injury to a joint, such as a bad sprain or fracture, can cause damage to the articular cartilage. This damage to the cartilage eventually leads to arthritic changes in the joint.

### **When to Visit a Podiatrist**

Because arthritis can affect the structure and function of the feet, it is important to see a doctor of podiatric medicine if any of the following symptoms occur in the feet:

- Swelling in one or more joints
- Recurring pain or tenderness in any joint
- Redness or heat in a joint
- Limitation in motion of joint
- Early morning stiffness
- Skin changes, including rashes and growths

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### **Diagnosis and Treatment**

Different forms of arthritis affect the body in different ways; many have distinct systemic effects that are not common to other forms. Early diagnosis is important to effective treatment of any form. Destruction of cartilage is not reversible, and if the inflammation of arthritic disease isn't treated, both cartilage and bone can be damaged, which makes the joints increasingly difficult to move. Most forms of arthritis cannot be cured but can be controlled or brought into remission; perhaps only five percent of the most serious cases, usually of rheumatoid arthritis, result in such severe disability that walking aids or wheelchairs are required.

The objectives in the treatment of arthritis are controlling inflammation, preserving joint function (or restoring it if it has been lost), and curing the disease if possible. Because the foot is such a frequent target, the doctor of podiatric medicine is often the first physician to encounter some of the complaints—inflammation, pain, stiffness, excessive warmth, injuries. Even bunions can be manifestations of arthritis.

Arthritis may be treated in many ways. Patient education is important. Physical therapy and exercise may be indicated, accompanied by medication. In such a complex disease system, it is no wonder that a wide variety of drugs have been used effectively to treat it; likewise, a given treatment may be very effective in one patient and almost no help at all to another. Aspirin is still the first-line drug of choice for most forms of arthritis and the benchmark against which other therapies are measured.

The control of foot functions with shoe inserts called orthotics, or with braces or specially prescribed shoes, may be recommended. Surgical intervention is a last resort in arthritis, as it is with most disease conditions. Damaged joints can be replaced surgically with artificial joints.

### **Prevention**

Not all types of arthritis are preventable. Osteoarthritis may be helped by correcting any faulty mechanics that lead to the joint not moving properly. Custom orthotics from your podiatrist will make sure that the foot and ankle joints are properly aligned. Controlling the uric acid level in people prone to gout helps to prevent gouty attacks and thereby reduces the chance of the associated arthritis.

More information is available from the **Arthritis Foundation**.

*Information courtesy of APMA.org*