

# **Arthritis Awareness\***

Some older adults call it "Arthur"; others refer to it as their constant compassion, but most describe it as extremely painful. Arthritis is a chronic joint disease. It is commonly believed that arthritis is a disease of older adults, but the truth is that it affects people of all ages, including children. Women are at higher risk of developing arthritis than men. There are many types of arthritis, but the two most common are osteoarthritis (OA) and rheumatoid arthritis (RA).

OA is more common than RA. It affects 27 million Americans, according to the Arthritis Foundation. OA is the breakdown of cartilage that causes the bones to rub against each other, causing stiffness, pain, and loss of movement in the joint. Cartilage is the part of the joint that cushions the ends of the bones and allows easy movement of joints. OA typically affects only certain joints, such as the hips, hands, knees, low back and neck. After age 50, women are more often affected by OA than men.

RA is mainly characterized by inflammation of the lining of the joints. It can lead to long-term joint damage, resulting in chronic pain, loss of function and disability, as well as disfiguration.

Approximately 1.3 million people in the United States have rheumatoid arthritis. Seventy percent of people with RA are women. Onset usually occurs between 30 and 50 years of age.

Juvenile arthritis (JA) refers to any form of arthritis or an arthritis-related condition that develops in children or teenagers who are less than 18 years of age. Approximately 294,000 children under the age of 18 are affected by pediatric arthritis and rheumatologic conditions.



## More Information about OA

## **Symptoms of Osteoarthritis:**

- Pain or stiffness in joints after periods of inactivity or excessive use
- Grating or "catching" sensation during joint movement
- Bony growths at the margins of affected joints

### **Causes of Osteoarthritis:**

The cause of OA is not yet known, but certain factors increase the risk of developing OA, including:

- o Heredity
- o Overweight
- o Joint injury
- o Repeated overuse of certain joints





- o Lack of physical activity
- o Nerve injury
- o Aging

### **Management of Osteoarthritis:**

- Treatment of OA varies with the severity of symptoms and focuses on decreasing pain and improving joint movement.
- Treatment plans often include a combination of drugs, rest, physical activity, joint protection, use of heat or cold to reduce pain, and physical or occupational therapy.
- For every one pound of weight lost, there is a four pound reduction in the load exerted on the knee for each step taken during daily activities.
- Many people with OA use pain medications such as acetaminophen or nonsteroidal antiinflammatory drugs (NSAIDs) to help reduce joint pain, stiffness and swelling.
- Losing as few as 11 pounds can cut the risk of developing knee osteoarthritis by 50 percent for some women.
- Physical activity keeps joints flexible and maintains or improves muscle strength.
- Joint protection prevents strain or stress on painful joints.
- Weight control is important for prevention of and to slow the progression of OA affecting the weight-bearing joints (knees and hips) and low back.
- Weight loss of only 15 pounds can cut knee pain in half for overweight individuals with arthritis.
- Corticosteroids or hyaluronic acid derivatives can be injected into joints that are unresponsive to treatment.
- Dietary supplements such as glucosamine and chondroitin sulfate have been shown in some studies of knee OA to relieve pain and improve joint function in severe OA.
- Surgery is an important consideration in people with advanced OA associated with joint damage and/or marked limitations in joint function.

## More Information about RA

# **Symptoms of Rheumatoid Arthritis:**

RA can start in any joint, but it most commonly begins in the smaller joints of the fingers, hands and wrists. Joint involvement is usually symmetrical, meaning that if a joint hurts on the left hand, the same joint will hurt on the right hand. In general, more joint erosion indicates more severe disease activity.



Other common physical symptoms include:

- Fatigue
- Stiffness, particularly in the morning and when sitting for long periods of time. Typically, the longer the morning stiffness lasts, the more active your disease is.
- Weakness
- Flu-like symptoms, including a low-grade fever
- Pain associated with prolonged sitting
- The occurrence of flares of disease activity followed by remission or disease inactivity
- Rheumatoid nodules, or lumps of tissue under the skin, appear in about one-fifth of people with RA. Typically found on the elbows, they can indicate more severe disease activity.
- Muscle pain
- Loss of appetite, depression, weight loss, anemia, cold and/or sweaty hands and feet
- Involvement of the glands around the eyes and mouth, causing decreased production of tears and saliva

Advanced changes to look out for include damage to cartilage, tendons, ligaments and bone, which causes deformity and instability in the joints. The damage can lead to limited range of motion, resulting in daily tasks (grasping a fork, combing hair, buttoning a shirt) becoming more difficult. You also may see skin ulcers and a general decline in health. People with severe RA are more susceptible to infection.

The effects of rheumatoid arthritis can vary from person to person. In fact, there is some growing belief that RA isn't one disease, but it may be several different diseases that share commonalities.

### Causes of Rheumatoid Arthritis:

The exact cause of rheumatoid arthritis currently is unknown. In fact, there probably isn't an exact cause for RA. Researchers now are debating whether RA is one disease or several different diseases with common features.

## **Immune System**



We do know that the body's immune system plays an important role in rheumatoid arthritis. In fact, RA is referred to as an autoimmune disease because people with RA have an abnormal immune system response.

In a healthy immune system, white blood cells produce antibodies that protect the body against foreign substances. People who have RA have an immune system that mistakes the body's healthy tissue for a foreign invader and attacks it.

One example of this miscommunication in the body is known as rheumatoid factor. Rheumatoid factor is an antibody that is directed to regulate normal antibodies made by the body. It works well in people with small quantities of rheumatoid factor. People with high levels of rheumatoid factor, however, may have a malfunctioning immune system. This is why your doctor often will request a test measuring rheumatoid factor when trying to diagnose RA. In general, the higher the level of rheumatoid factor present in the body, the more severe the disease activity is.

# **Management of Rheumatoid Arthritis:**

Because rheumatoid arthritis presents itself on many different fronts and in many different ways, treatment must be tailored to the individual, taking into account the severity of your arthritis, other medical conditions you may have and your individual lifestyle. Current treatment methods focus on relieving pain, reducing inflammation, stopping or slowing joint damage and improving your functioning and sense of well-being.

Rheumatoid arthritis is a serious disease. It is crucial that you get an early diagnosis and work with your doctor to find the best treatment for you so that you can live well with it. Just a few years ago, your doctor might have only prescribed an over-the-counter pain reliever, like an analgesic or non-steroidal, anti-inflammatory drug (NSAID), until you experienced increased disease progression. Now, with the improvement of available medications, doctors know that they have to be more aggressive early on in order to prevent severe deformity and joint erosion.

In order to get the proper treatment for RA, you need to make sure you have the proper health-

care team. Your primary doctor for treating RA should be a rheumatologist (ROO-ma-tall-o-jist), a physician with special training in arthritis and other disease involving diseases of the bone, muscles and joints. Your rheumatologist will coordinate with your primary care physician. Other team members may include a physical therapist, an occupational therapist, a nurse, a psychologist, an orthopaedic surgeon, a physiatrist, and a social worker. Learn more about these specialists in the Glossary of Health Professionals.



### Medications

The proper medication regimen is important in controlling your RA. You must help your doctor determine the best combination for you. The main categories of drugs used to treat RA are:



- Nonsteroidal Anti-Inflammatory Drugs (NSAIDs) These drugs are used to reduce inflammation and relieve pain. These are medications such as aspirin, ibuprofen, indomethacin and COX-2 inhibitors such as valdecoxib and celecoxib.
- Analgesic Drugs These drugs relieve pain, but don't necessarily have an effect on inflammation. Examples of these medications are acetaminophen, propoxyphene, mepeidine and morphine.
- **Glucocorticoids or Prednisone** These are prescribed in low maintenance doses to slow joint damage caused by inflammation.
- **Disease Modifying Antirheumatic Drugs (DMARDs)** These are used with NSAIDs and/or prednisone to slow joint destruction caused by RA over time. Examples of these drugs are methotrexate, injectable gold, penicillamine, azathioprine, chloroquine, hydroxychloroquine, sulfasalazine and oral gold.
- **Biologic Response Modifiers** These drugs directly modify the immune system by inhibiting proteins called cytokines, which contribute to inflammation. Examples of these are abatacept, etanercept, infliximab, adaliumumab and anakinra.
- **Protein-A Immuoadsorption Therapy** This is not a drug, but a therapy that filters your blood to remove antibodies and immune complexes that promote inflammation.

## Surgery

Many people with rheumatoid arthritis might consider surgery as part of their treatment plan. The surgical options available today can contribute greatly to improving your quality of life with RA.

### The Arthritis Foundation

The Arthritis Foundation supports research, health education and government advocacy efforts to improve the lives of the nearly 46 million Americans with arthritis, the nation's most common cause of disability. These services include:

- Number-one ranked comprehensive arthritis website, www.arthritis.org
- Toll-free information phone line: 1-800-283-7800
- Nearly 100 consumer educational brochures, booklets and books
- Arthritis Today, the Arthritis Foundation's bi-monthly consumer magazine reaching 3.8 million readers per issue
- Water- and land-based exercise classes, self-help courses and support groups
- · Local chapter offices nationwide
- Physician referral lists



- Extensive funding of arthritis research grants at institutions nationwide
- Federal and state advocacy efforts to ensure rights and access to care for all people with Arthritis

For a free brochure about osteoarthritis or to locate the nearest Arthritis Foundation chapter, call the Arthritis Foundation toll-free at 1-800-283-7800 or visit its website at www.arthritis.org. or, write to: Arthritis Foundation, P. O. Box 7669, Atlanta, GA 30357-0669.

The Arthritis Foundation is the only nationwide, nonprofit health organization helping people take greater control of arthritis. The mission of the Arthritis Foundation is to improve lives through leadership in the prevention, control and cure of arthritis and related diseases.

\*Information was obtained from The Arthritis Foundation.