Overview of Arthritis and Rheumatic Diseases

The term arthritis is often used to refer to any disorder that affects the joints. These disorders fall within the broader category of rheumatic diseases. There are more than 100 rheumatic diseases that together affect millions of Americans.

“Arthritis” literally means joint inflammation, which is a symptom of the disease.

Symptoms of rheumatic diseases include inflammation (redness or heat, swelling, pain) and loss of function of one or more of the body’s support structures. They especially affect joints, tendons, ligaments, bones, and muscles. Some rheumatic diseases can also involve internal organs.

Who Gets Arthritis and Rheumatic Diseases?

Rheumatic diseases affect millions of people of all races and ages in the United States. Some rheumatic diseases are more common among certain populations. For example:

- Rheumatoid arthritis, scleroderma, fibromyalgia, and lupus mostly affect women.
- The spondyloarthopathies and gout are more common in men. However, after menopause, the incidence of gout in women begins to rise.
- Lupus is more common and more severe in African Americans and Hispanics than in whites.

Types of Arthritis and Rheumatic Diseases

There are numerous types of arthritis and other rheumatic diseases, including:

- **Osteoarthritis**: the most common type of arthritis, damages both the cartilage (the tissue that cushions the ends of bones within the joint) and the underlying bone. Osteoarthritis can cause joint pain and stiffness. Disability results most often when the disease affects the spine, knees, and hips.
- **Rheumatoid arthritis**: a less common type of arthritis that occurs when the immune system attacks the lining of the joint (synovium). This produces pain, swelling and loss of joint function. The most commonly affected joints are those in the hands and feet.
- **Gout**: a type of arthritis caused by needle-like crystals of uric acid that gather in the joints, usually beginning in the big toe. Symptoms may come and go and include inflammation, swelling, and pain in the affected joint(s).
- **Infectious arthritis**: caused by infectious agents such as bacteria or viruses. Parvovirus arthritis and gonococcal arthritis are examples of infectious arthritis, as is the arthritis that occurs with Lyme disease, a bacterial infection caused by the bite of infected ticks.
- **Juvenile idiopathic arthritis**: the most common form of arthritis in childhood. Symptoms include pain, stiffness, swelling, and loss of joint function. It may be associated with rashes or fevers and may affect various parts of the body.
- **Spondyloarthropathies**: a group of rheumatic diseases that usually affect the spine. There are a few forms:
  - **Ankylosing spondylitis** may also affect the hips, shoulders, and knees.
  - **Reactive arthritis** is caused by infection of the lower urinary tract, bowel, or other organ. It is commonly associated with eye problems, skin rashes, and mouth sores.
  - **Psoriatic arthritis** is a form of arthritis that occurs in some patients with the skin disorder psoriasis. Psoriatic arthritis often affects the joints at the ends of the fingers and toes and is accompanied by changes in the fingernails and toenails. **Back pain** may occur if the spine is involved.
- **Bursitis**: occurs due to inflammation of the bursae (small, fluid-filled sacs that help reduce friction within the joint). Symptoms include pain and tenderness. Movement of nearby joints may also be affected.
- **Fibromyalgia**: symptoms include widespread muscle pain and tender points—areas on the body that are painful when pushed. Many people also experience fatigue and sleep disturbances.
- **Polymyalgia rheumatica**: involves tendons, muscles, ligaments, and tissues around the joint. Symptoms include pain, aching, and morning stiffness in the shoulders, hips, neck, and lower back. It is sometimes the first sign of **giant cell arteritis**, a disease of the arteries characterized by headaches, inflammation, weakness, weight loss, and fever.
- **Polymyositis**: causes inflammation and weakness in the muscles. The disease may affect the whole body and cause disability.
- **Scleroderma**: also known as systemic sclerosis. The disease is caused by excessive production of collagen (a fiber-like protein), leading to thickening of and damage to the skin, blood vessels, joints, and sometimes internal organs such as the lungs and kidneys.
- **Systemic lupus erythematosus**: also known as lupus or SLE. This disease is caused when the immune system attacks the body’s own healthy cells, resulting in inflammation of and damage to the joints, skin, kidneys, heart, lungs, blood vessels, and brain.
- **Tendinitis**: inflammation of tendons (tough cords of tissue that connect muscle to bone).
This is caused by overuse, injury, or a rheumatic condition and may restrict movement of nearby joints.

Symptoms of Arthritis and Rheumatic Diseases
Different types of arthritis and rheumatic diseases have different signs and symptoms. In general, people who have arthritis feel pain and stiffness in one or more joints. There may also be tenderness, warmth, redness in a joint, and/or difficulty using or moving a joint normally.

Causes of Arthritis and Rheumatic Diseases
There are probably many genes that make people more likely to have rheumatic diseases. Some genes have been identified in certain diseases, such as rheumatoid arthritis, juvenile arthritis, and lupus. People with osteoarthritis may have inherited cartilage weakness.

If you have the disease gene, something in your environment may trigger the disease. For example, scientists have found a connection between Epstein-Barr virus and lupus. In addition, repeated joint injury may lead to osteoarthritis.

Diagnosis of Arthritis and Rheumatic Diseases
To diagnose you with arthritis or another rheumatic disease, your doctor may:

- Ask you about your medical history.
- Give you a physical exam.
- Take samples of blood, urine or synovial fluid (lubricating fluid in the joint) for a laboratory test.
- Take x-rays.

Treatment of Arthritis and Rheumatic Diseases
Although there is no cure for arthritis and rheumatic diseases, medications may slow the course of the disease and prevent further damage to joints or other parts of the body. Exercise and diet changes may also help. Surgery may be recommended in some cases.

- Common medications include:
  - Pain relievers that are taken by mouth. These include over-the-counter or prescription medications, depending on the severity of pain.
  - Creams or ointments that are rubbed into the skin over sore muscles or joints to relieve pain.
Nonsteroidal anti-inflammatory drugs (NSAIDs) are used to treat pain and inflammation. Ibuprofen and naproxen sodium, are available over the counter, whereas other NSAIDs are available by prescription only.

Disease-modifying antirheumatic drugs (DMARDs) slow or stop the immune system from attacking the joints and causing damage.

Biologic response modifiers block specific immune pathways that are involved in the inflammatory process.

Janus kinase inhibitors are a new class of medications that block specific pathways that are involved in the body’s immune response.

Corticosteroids are strong inflammation-fighting drugs that are given by mouth, in creams applied to the skin, intravenously, or by injection directly into the affected joint(s).

Surgery may be required to repair damage to a joint after an injury or to restore function or relieve pain in a joint damaged by arthritis. Many types of surgery are performed for arthritis, such as:

- Outpatient procedures performed arthroscopically (through small incisions over the joints).
- Total joint replacement, or replacement of a damaged joint with an artificial joint.

Exercise and diet. Physical activity can reduce joint pain and stiffness and increase flexibility, muscle strength, and endurance. Although there is not a specific diet that helps arthritis, a well-balanced diet, along with exercise, helps people manage their body weight and stay healthy. Read more about how exercise and diet can help you cope with arthritis and rheumatic disease.

Who Treats Arthritis and Rheumatic Diseases?

Doctors who diagnose and treat arthritis and other rheumatic disease include:

- General practitioners, such as your family doctor.
- Rheumatologists, who specialize in arthritis and other diseases of the bones, joints, and muscles.
- Orthopaedists, who specialize in treatment and surgery for bone and joint diseases.
- Physical therapists, who help improve joint function.
- Occupational therapists, who teach ways to protect joints, minimize pain, perform activities of daily living, and conserve energy.
- Dietitians, who teach about good diets and maintaining a healthy weight.
- Nurse educators, who help you understand your condition and help start treatment plans.
- Rehabilitation specialists, who help you make the most of your physical potential.
- Licensed acupuncture therapists, who reduce pain and improve physical functioning by inserting fine needles into the skin at specific points on the body.
- Psychologists or social workers, who help with social challenges caused by medical conditions.
- Chiropractors, who focus treatment on the relationship between the body's structure—mainly the spine—and its functioning.
- Massage therapists, who press, rub, and otherwise manipulate the muscles and other soft tissues of the body.

Living With Arthritis and Rheumatic Diseases

There are many things you can do to help you live with arthritis and other rheumatic diseases, including the following.

- Exercise can reduce joint pain and stiffness and increase flexibility, muscle strength, and endurance. Exercise can help people lose weight, which reduces stress on painful joints. You should speak to your doctor about a safe, well-rounded exercise program.
- Diet is especially important if you have gout. You should avoid alcohol and foods that are high in purines, such as liver, kidney, sardines, anchovies, and gravy.
- Heat and cold therapies can reduce the pain and inflammation of arthritis. Heat therapy increases blood flow, tolerance for pain, and flexibility. Cold therapy numbs the nerves around the joint to reduce pain and may relieve inflammation and muscle spasms.
- Relaxation therapy can help reduce pain by teaching you ways to release muscle tension throughout the body.
- Splints and braces support weakened joints or allow them to rest. You should see your doctor before wearing a splint or brace to ensure proper fit. Otherwise, incorrect use of a splint or brace can cause joint damage, stiffness, and pain.
- Assistive devices, such as a cane to help with walking, can reduce some of the weight placed on a knee or hip affected by arthritis. A shoe insert (orthotic) can ease the pain of walking caused by arthritis of the foot or knee. Other devices can help with activities such as opening jars, closing zippers, and holding pencils.

For More Info

U.S. Food and Drug Administration
Toll free: 888-INFO-FDA (888-463-6332)
Website: https://www.fda.gov

Drugs@FDA at https://www.accessdata.fda.gov/scripts/cder/daf. Drugs@FDA is a searchable
catalog of FDA-approved drug products.

**Centers for Disease Control and Prevention, National Center for Health Statistics**
Website: [https://www.cdc.gov/nchs](https://www.cdc.gov/nchs)

**National Institute of Allergy and Infectious Diseases**
Website: [https://www.niaid.nih.gov](https://www.niaid.nih.gov)

**National Center for Complementary and Integrative Health**
Website: [https://nccih.nih.gov](https://nccih.nih.gov)

**American Academy of Orthopaedic Surgeons**
Website: [https://www.aaos.org](https://www.aaos.org)

**American College of Rheumatology**
Website: [https://www.rheumatology.org](https://www.rheumatology.org)

**Arthritis Foundation**
Website: [https://www.arthritis.org](https://www.arthritis.org)

If you need more information about available resources in your language or other languages, please visit our webpages below or contact the NIAMS Information Clearinghouse at [NIAMSInfo@mail.nih.gov](mailto:NIAMSInfo@mail.nih.gov).

- [Asian Language Health Information](https://www.niams.nih.gov/NIAMSInfo/information/clearinghouse/AsianLanguageHealthInformation)
- [Spanish Language Health Information](https://www.niams.nih.gov/NIAMSInfo/information/clearinghouse/SpanishLanguageHealthInformation)