

## **About arthritis**

You've probably heard the word "arthritis" before. And now, you may be wondering if it could be affecting you. By definition, arthritis means "joint inflammation," and it's used to describe more than 100 different diseases and conditions that affect joints, the tissues that surround joints, and other connective tissue.

Arthritis can affect people differently. It's common in adults 65 and older, but it can affect people of all ages, races, and ethnic groups.

### **Two of the most common forms of arthritis are osteoarthritis and rheumatoid arthritis.**

Osteoarthritis and rheumatoid arthritis have different causes, risk factors, and effects on the body:

- Osteoarthritis pain, stiffness, or inflammation most frequently appears in the hips, knees, and hands.
- Rheumatoid arthritis commonly affects the hands and wrists but can also affect areas of the body other than the joints.

Even though they have these differences, osteoarthritis and rheumatoid arthritis often share common symptoms:

- Joint pain
- Stiffness
- Inflammation or swelling

### **The importance of talking to your doctor.**

Sometimes arthritis symptoms make it harder to do certain activities. By talking to your doctor about your symptoms, he or she may help you find other ways to continue doing some of those activities.

## **What is Osteoarthritis(OA)?**

Often called "wear and tear" arthritis, osteoarthritis (OA) is the most common form of arthritis. In most cases, over time, cartilage in joints breaks down, and OA symptoms begin to occur. OA is most commonly found in the:

- Knees
- Hips
- Hands and fingers
- Spine

Wrists, elbows, shoulders, and ankles can also be affected by OA, but this occurs less frequently. When OA is found in these joints, there may have been a history of injury or stress to that joint.

### **The symptoms of osteoarthritis**

Typically, OA comes on slowly. For many, the first signs are joints that ache after physical work or exercise. As the disease progresses, other most common symptoms include:

- Pain in a joint
- Swelling or tenderness in one or more joints
- Stiffness after periods of inactivity, such as sleeping or sitting
- Flare-ups of pain and inflammation after use of the affected joint
- Crunching feeling or sound of bone rubbing on bone (called crepitus) when the joint is used

If you are experiencing any of these symptoms, it's important to talk to your doctor to find out if you have OA.

## **Where do symptoms of osteoarthritis typically appear?**

OA most often occurs in the following areas:

### **Knees**

Because knees are primarily weight-bearing joints, they are very commonly affected by OA. If you have OA in your knees, you may feel that these joints are stiff, swollen, and painful, making it hard to walk, climb, and get in and out of chairs and bathtubs.

### **Hips**

OA in the hip can cause pain, stiffness, and severe disability. Hips both support the weight of the body and enable movement of your lower body. When you have OA in your hips, you may also feel the pain in your groin, inner thigh, or knees. OA in the hip can lead to difficulty moving, bending, and walking.

### **Fingers and hands**

When OA occurs in hands and fingers, the base of the thumb joint is commonly affected and people experience stiffness, numbness, and aching. Other symptoms of hand and finger OA include:

- Heberden's nodes: small bony knobs that appear on the end joints of fingers
- Bouchard's nodes: small bony knobs that appear on the middle joints of fingers

### **Spine**

If you have OA of the spine, you may experience stiffness and pain in the neck or in the lower back. Sometimes arthritis-related changes in the spine can put pressure on the nerves, causing weakness or numbness in your arms or legs.

## **What causes osteoarthritis?**

While the exact cause of OA is unknown, joint damage can be due to repetitive movement (also known as "wear and tear"). It can also begin as the result of an injury. Either way, with OA there's erosion of the cartilage, the part of the joint that covers the ends of the bones.

- Cartilage acts as a shock absorber, allowing the joint to move smoothly.
- As cartilage breaks down, the ends of the bones thicken and the joint may lose its normal shape.

- With further cartilage breakdown, the ends of the bones may begin to rub together, causing pain.
- In addition, damaged joint tissue can cause the release of certain substances called prostaglandins, which can also contribute to the pain and swelling characteristic of the disease.

Here are some factors that may increase your risk of developing OA:

### **Age**

Age is the strongest risk factor for OA. Although OA can start in young adulthood, in these cases, it is often due to joint injury.

### **Gender**

OA affects both men and women. However, before age 45, OA occurs more frequently in men; after age 45, OA is more common in women.

### **Joint injury or overuse caused by physical labor or sports**

Traumatic injury to a joint increases your risk of developing OA in that joint. Joints that are used repeatedly in certain jobs may be more likely to develop OA because of injury or overuse.

### **Obesity**

The chances of getting OA generally increase with the amount of weight the body's joints have to bear. The knee is particularly affected because it is a major weight-bearing joint.

### **Joint Alignment**

People with joints that don't move or fit together correctly, like bowlegs, dislocated hips, or double-jointedness, are more likely to develop OA in those joints.

### **Heredity**

An inherited defect in one of the genes responsible for manufacturing cartilage may be a contributing factor in developing OA.

### **Osteoarthritis diagnosis**

If you experience joint pain, stiffness, and/or swelling that won't go away; you should make an appointment to see your doctor. Your doctor will be able to determine if you have arthritis and, if so, what type.

When you see your doctor about your symptoms, he or she may ask questions about when and how you started experiencing them. The doctor will probably give you a physical examination to check your general health, and examine the joints that are bothering you.

You may also need other tests to help confirm the diagnosis of OA and determine the extent and severity of joint damage. Some of these may include:

- **X-rays.** X-rays can help the doctor determine whether you have OA or rheumatoid arthritis (RA). A series of X-rays obtained over time can show how fast joint damage is progressing. X-rays of the affected joints can show cartilage loss, bone damage, and extra bone growth (known as bone spurs) that can develop on the surface of normal bones.
- **Joint Aspiration.** If your doctor is still uncertain about the diagnosis or suspects that you may have an infection, he or she may perform joint aspiration. In this procedure, your

doctor withdraws and examines synovial fluid (a liquid that lubricates the joint) from affected joints using a needle.

If you are experiencing some of these symptoms, the sooner you talk to your doctor, the sooner you may get diagnosed and get treatment.

## **What is Rheumatoid Arthritis(RA)?**

Rheumatoid arthritis (RA) is an autoimmune disease where the body's immune system attacks normal joint tissues, causing inflammation of the joint lining.

This inflammation of the joint lining (called the synovium) can cause pain, stiffness, swelling, warmth, and redness. The affected joint may also lose its shape, resulting in loss of normal movement. RA is an ongoing disease, with active periods of pain and inflammation, known as flares, alternating with periods of remission, when pain and inflammation disappear.

RA can affect many different joints. In some people, it can even affect parts of the body other than the joints, including the eyes, blood, the lungs, and the heart.

## **Symptoms of Rheumatoid Arthritis**

Although RA is often a chronic disease, the severity and duration of symptoms may unpredictably come and go. With RA, people experience periods of increased disease activity, called *flare-ups* or *flares*, alternating with periods when the symptoms fade or disappear, called *remission*.

If you experience some of these symptoms, you may want to talk to your doctor:

- Pain and stiffness lasting for more than 1 hour in the morning or after a long rest
- Joint inflammation in the joints closest to the hand, such as wrist and fingers, although the neck, shoulders, elbows, hips, knees, ankles, and feet can also be affected
- Symmetrical pattern of inflammation, meaning both sides of the body are usually affected at the same time
- Fatigue, an occasional fever, and a general sense of not feeling well (called malaise)

As RA progresses, about 25% of people with the disease develop small lumps of tissue under the skin, called *rheumatoid nodules*, which can vary in size. Usually, they are not painful.

If you are experiencing any of the symptoms described above, it is important to find out from a doctor if you have RA.

## **What causes rheumatoid arthritis?**

The exact causes of RA are unknown. But research has shown that several factors may contribute to the development of RA:

- **Genetic.** Certain genes play a role in the immune system — for some people, genetic factors may be involved in determining whether they will develop RA.
- **Environmental.** In people who have inherited a genetic tendency for the disease, RA can be triggered by an infection. However, RA is not contagious — you can't "catch it" from anyone.

## **Effects of rheumatoid arthritis**

Rheumatoid arthritis can cause joint inflammation, which can affect the ability to go about your daily activities. If left untreated, RA can worsen and destroy joints. After the onset of the disease, some of the effects of RA are as follows:

- Tendons become inflamed and may rupture (tear apart).
- Swelling can severely damage or destroy ligaments that hold joints together. It can also damage joint cartilage and bone.
- Erosion of the bones of the joint can occur, causing pain and deformity.

## **Rheumatoid arthritis diagnosis**

If you have persistent discomfort and swelling in multiple joints on both sides of your body, make an appointment to see your doctor. Early diagnosis and treatment can help slow disease progression.

When you see your doctor about your symptoms, he or she may ask questions about your medical history and examine the joints that are bothering you. Your doctor will also decide if you need other tests to help confirm the diagnosis of RA and determine the extent and severity of joint damage. These may include:

### **Blood Tests**

- One of the tests looks for an antibody called rheumatoid factor. About 70% to 90% of people with RA have this antibody. However, it is also possible to have the rheumatoid factor in your blood and not have RA.
- Another test measures your erythrocyte sedimentation rate (or sed rate), which will indicate the presence of an inflammatory process in your body. People with RA tend to have abnormally high sed rates.

### **X-rays**

- X-rays of all your joints can determine the extent of damage in the joints that are affected. A sequence of X-rays obtained over time can show the progression of RA.

If you have joint pain, stiffness, and/or swelling that won't go away, you may have arthritis. Talk with your doctor about your symptoms.

## Arthritis symptoms checklist

This Arthritis Symptoms Checklist can help you and your doctor determine if arthritis could be the cause of your symptoms. Simply answer the questions, print out the checklist, and take it to your doctor to discuss the results.

Do you have pain in one or more of your joints?

Yes  No

Do you have swelling in one or more joints?

Yes  No

Do you have stiffness in your joints, especially after not moving for an extended period of time (e.g., moving in the morning)?

Yes  No

Do you have pain or discomfort in a joint that has a history of injury?

Yes  No

*You may print this questionnaire and take it to your doctor for consultation*

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## Treatment Options

Part of taking an active role in managing your arthritis is knowing what your treatment options are. An informed decision made with your doctor can be one of the best decisions you can make to help you get effective symptom relief.

It's important to understand that although there is no way to reverse the cartilage loss of osteoarthritis or rheumatoid arthritis, there are treatment options available to help you relieve the symptoms. These can include:

- Medications
- Exercise
- Diet
- Alternative therapies
- Surgery

your arthritis symptoms. Every situation is different, so discuss your symptoms and your lifestyle with your doctor so you can work together for the best option or options for you.

## **Over the counter medications (without doctor's advice)**

One way to manage arthritis symptoms is with an over-the-counter (OTC) medication. It's important to remember that even though these medications can be purchased without a prescription, they are still medications. That's why it's important to take them as directed.

Some OTC medications are:

### **Topical pain-relieving creams, rubs, and sprays**

These medications are applied directly to the skin over the joints to relieve pain.

### **Acetaminophen (Commonly known as paracetamol)**

Acetaminophen may be used by doctors to help relieve osteoarthritis pain. However, acetaminophen does not reduce inflammation. While acetaminophen is generally known as an over-the-counter medication, at higher doses it is available by prescription.

### **Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)**

Unlike acetaminophen, NSAIDs treat both arthritis pain *and* inflammation. While all NSAIDs work similarly, each is a different chemical and therefore you may respond differently to different NSAIDs. NSAIDs are often sold as over-the-counter medications. However, at higher doses, they are available by prescription by your doctor.

## **Prescription Medication**

Prescription medications are an available treatment option to help manage arthritis symptoms. Talk to your doctor about them to see what may be best for you.

### **Acetaminophen**

At higher doses, acetaminophen is available only by prescription. As with the over-the-counter version, prescription acetaminophen helps relieve arthritis pain but does not reduce inflammation.

### **Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)**

Prescription NSAIDs are often recommended by doctors to treat arthritis symptoms.

### **Narcotic Painkillers**

Narcotics relieve pain by targeting pain receptors on nerve cells. But they do not reduce inflammation. Some are prescribed for short-term use because of the potential for physical and psychological dependence.

### **Corticosteroids**

These anti-inflammatory agents may be injected into the affected joints to temporarily relieve osteoarthritis pain. They are not recommended for more than 2 to 4 treatments per year. These can also be taken orally for the treatment of rheumatoid arthritis.

## **Hyaluronic Acid Substitutes**

This treatment is approved only for osteoarthritis of the knee. It is given in a series of 3 to 5 injections and is designed to replace the component of the joint involved in the joint's lubrication and nutrition.

## **Disease Modifying Anti-Rheumatic Drugs (DMARDs)**

Disease modifying anti-rheumatic drugs (DMARDs) have been shown to reduce the signs and symptoms of rheumatoid arthritis as well as slow the progression of the disease. In most cases, once a diagnosis of rheumatoid arthritis is confirmed, a DMARD is started.

**Everyone responds differently to medications so only you and your doctor can decide which one is right for you. Talk to your doctor about the right treatment option for you.**

## **More than medication**

Medications are an important part of managing arthritis symptoms. But medication alone may not be enough. Guidelines from both the American College of Rheumatology (ACR) and the Osteoarthritis Research Society International (OARSI) suggest taking an active approach that includes medication as well as lifestyle changes to more effectively manage arthritis symptoms.

## **Beyond Medication**

Medication can help you manage arthritis symptoms, but there are other things you can do in addition to medication.

### **Keep Fit**

- Follow a healthy diet.
- Find a balance between physical activities (like walking or water aerobics) and rest.

### **Keep Informed**

- Don't be afraid to ask your doctor questions about arthritis or your treatment.
- Use books, magazines, and online resources to learn more about arthritis and stay up to date on new developments in medicine and treatment options.

### **Keep Working with Your Doctor**

- Talk to your doctor about changes in your arthritis symptoms to help him or her determine the right treatment for you.
- Always take your medication as your doctor prescribes.
- Be sure to report any changes in your health or any side effects that you may experience. Your doctor needs that information to make sure that your treatment is the right one for you.

### **Keep Discovering Arthritis-Friendly Products**

Every year, new products may be available that can help you with arthritis symptoms, protect your joints from painful moves, or improve your ability to perform daily tasks. Look for items like:

- Special garden trowels
- Elastic shoelaces
- Foot warmers
- Electric jar openers
- Massaging heating pads
- Dual handle sock assists
- One-touch table lamps
- Electric toothbrushes
- Reacher aids
- Arthritis bras
- Long-handled brushes and combs

## **Exercise to relieve Arthritis symptoms**

Contrary to what many people may think, exercise and staying active is not only good for your health, but it can also help relieve the symptoms of arthritis. In fact, the American College of Rheumatology (ACR) announced that people with arthritis who exercise have less pain, more energy, improved sleep, and better day-to-day function.

### **Staying active also can help you:**

- Keep your joints flexible
- Improve your ability to move

But before you start any exercise program, it's important to talk to your doctor.

### **Different types of exercises include:**

- **Aerobic** — Low impact activities like walking, swimming, water aerobics, or riding a bike are good options. These can put less stress on your joints while they help build endurance and improve cardiovascular health.
- **Strength Training** — Strength-training exercises, like those that use weights or elastic bands for resistance, can build muscle tissue, which, in turn, helps support and protect the body's joints.
- **Range-of-Motion/Stretching** — Together, range-of-motion and stretching exercises can help relieve stiffness and increase joint mobility. They can also help relieve stress. Moving your joints through their normal range of motion can help keep them flexible, so you can go about your daily routine more comfortably.

### **Besides helping to ease arthritis symptoms, exercise can also:**

- Improve your mood
- Strengthen your heart
- Improve blood flow
- Help you lose weight

### **The importance of rest and sleep.**

Any exercise regimen should include rest. Your body sends signals that tell you when to slow down or stop. It's important to learn how to recognize the signs of overexertion, which can include:

- Fatigue
- Lack of energy
- Muscle weakness

Getting proper sleep is also an important part of managing arthritis symptoms. If you find that joint pain is interfering with your ability to rest or sleep, talk to your doctor.

### **Weight loss & nutrition**

Being overweight increases the risk for developing OA. Even a little weight loss can make a difference when it comes to reducing stress on your joints, especially the knees. For every pound you lose, you remove about 4 pounds of stress from your knees.

### **The role of nutrition**

Along with regular exercise, a balanced diet is important in helping you lose weight. Here are a few nutritional tips:

- Eat a variety of foods, focusing on a greater proportion of whole grain products, vegetables, and fruit.
- Keep your diet low in fat, saturated fat, and cholesterol — and moderate in sugars.
- Choose foods that are rich in polyunsaturated fatty acids and antioxidants. Fish such as salmon, lake trout, and albacore tuna, as well as fish oil, contain high amounts of omega-3 fatty acids.
- If you drink alcohol, do so in moderation.

## **Alternative Therapy for Arthritis Symptoms**

Studies have shown that some alternative therapies can help you manage arthritis symptoms. So why not keep an open mind? Don't consider your approach to managing arthritis symptoms complete until you look into alternative therapies. Here are some ideas:

### **Meditation and Relaxation**

Meditation and relaxation techniques can help reduce muscle tension and the stress that can accompany arthritis. In one study, RA patients who meditated 45 minutes a day reduced their stress by one-third.

### **Yoga**

Yoga is an exercise that can increase muscle strength, improve flexibility, and promote balance. It's also associated with increased mental energy, positive feelings, and fewer body aches and pains. Yoga can be an effective way to increase physical activity.

### **Tai Chi**

Tai chi is a slow-moving meditative exercise that originated in China. Many people practice tai chi to ease pain and stiffness, improve balance (which can help decrease the risk of falls), and improve overall health and well-being. It involves breathing deeply as you move your body slowly, gently, and with awareness.

**Acupuncture**

Acupuncture has been practiced in China and other Asian countries for over 2,000 years. It involves locating specific points in the body to stimulate nerves, muscles, and connective tissue. It is thought to decrease pain by releasing the body's natural chemicals that block pain. Acupuncture has been shown in a government study to provide pain relief and improve function for people with osteoarthritis of the knee.

**Nutritional Supplements**

Nutritional supplements, when taken correctly, may also be beneficial. However, some of these may interfere with other medicines you are taking, so before you try adding a supplement, talk to your doctor.

**Massage Therapy**

Massage can help increase blood flow and increase warmth to a stressed area, which may help relieve pain.

Keep your doctor in the loop.

Before starting any alternative therapy please consult your doctor