

# Inflammatory and Rheumatoid Arthritis

Inflammatory arthritis attacks the joint lining, causing swelling, stiffness and, untreated, joint damage.

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## What you're feeling

You may notice pain and swelling in your joints, often in your hands, wrists, or feet. This discomfort can feel like a deep ache or a sharp sting. It might stay in one spot for months or years without you realizing why. You may find that certain movements become difficult. Reaching behind your back to fasten a bra can feel stiff. Tucking in your shirt might pull at your sides. Lifting objects can feel heavier than usual.

The pain often changes throughout the day. It may be worse when you first wake up in the morning. Your joints might feel stiff and hard to move. This stiffness usually improves as you get more active during the day. However, pushing too hard can make the pain flare up again later. You might also feel pain at night, which can disrupt your sleep. Sleeping on the affected side can put extra pressure on inflamed joints, making it hard to find a comfortable position.

In some cases, you might experience swelling around your ankles. This can cause intermittent symptoms that come and go. You may not notice it right away because the pain is not constant. It can linger for a long time before you connect it to your overall health. Your doctor will look for these signs to understand how the condition is affecting you.

Living with inflammatory arthritis means managing these ups and downs. You might have good days where you feel normal, followed by days where simple tasks feel challenging. Understanding these patterns helps your care team support you better. They can adjust your treatment to help reduce pain and improve your daily function. You are not alone in this experience. Many people with rheumatoid arthritis face similar challenges. With the right care, you can find ways to manage the symptoms and stay active.

## What's actually happening

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Your immune system is a defense network that usually fights off germs. In rheumatoid arthritis, it mistakenly attacks your own joints. It treats the smooth lining of your joint as if it were an invader. This causes the lining to swell and become inflamed. The swelling creates pressure and pain. Over time, this inflammation damages the cartilage and bone inside the joint.

Cartilage is the smooth coating on the ends of your bones. It acts like a shock absorber in a car. It lets your bones glide past each other without friction. The inflammation eats away at this protective layer. Without it, the bones rub together directly. This causes stiffness, grinding sensations, and significant pain. The joint capsule, which is the sleeve around the joint, also thickens. This further restricts your movement and makes daily tasks harder.

This process is different from wear-and-tear arthritis. In wear-and-tear arthritis, the damage comes from age and use. In rheumatoid arthritis, the damage comes from an active internal attack. This is why your doctor considers your overall health carefully. Patients with rheumatoid arthritis face higher risks of complications after surgery compared to those with simple wear-and-tear arthritis. The inflammation can affect healing and increase the chance of needing revision surgery.

Your doctor looks at the whole picture. They consider how the disease affects your bones and soft tissues. They also look at your other health conditions. For example, rheumatoid arthritis can weaken bones, leading to osteoporosis. This makes the bone structure less stable. Your treatment plan addresses both the joint damage and the underlying immune response. The goal is to stop the attack, relieve pain, and restore function safely.

## What we can do about it

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Start with self-care and movement. Gentle exercise and physiotherapy help keep your joints flexible and strong. This routine aims to reduce stiffness and maintain your daily function. Give these methods a fair trial for several weeks. Consistency matters more than intensity. Listen to your body and adjust activities to avoid pain.

Medical management focuses on controlling inflammation and protecting your bones. Your doctor may prescribe pain medication and anti-inflammatories to ease discomfort. For patients with rheumatoid arthritis and osteoporosis, denosumab helps maintain bone health and prevents joint damage. If you take biologic disease-modifying antirheumatic drugs, continuing them around the time of elective hand surgery does not significantly increase the risk of wound healing failures or surgical site infections. Your doctor will provide internet-derived information on treatment options to help you make informed decisions during counseling.

If symptoms remain severe despite these steps, seek specialist input. A doctor may refer you for further assessment. In some cases, a procedure may be considered to restore function. For example, total hip arthroplasty can reduce pain and improve outcomes similar to those seen in osteoarthritis patients. Total knee arthroplasty also yields significant improvements in both physician-reported and patient-reported outcomes. However, be aware that rheumatoid arthritis can affect surgical results differently depending on the joint. Total elbow arthroplasty carries higher long-term revision rates in rheumatoid arthritis compared to non-rheumatoid cases. Total shoulder arthroplasty is associated with higher rates of systemic and joint-related complications in

inflammatory arthritis. Total ankle arthroplasty may result in poorer patient-reported outcomes compared to other arthritis types, though functional improvement from baseline is still expected. Your doctor will weigh these risks and benefits to determine the best path forward for your specific condition.

## What to expect

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Your outlook depends heavily on which joint is affected and the type of arthritis you have. In general, inflammatory arthritis creates a more complex medical picture than wear-and-tear arthritis. If you are having joint replacement surgery, your doctor will manage your overall health carefully. This is because inflammatory arthritis is linked to a higher risk of systemic complications in the first 90 days after shoulder surgery. You may also face a higher risk of joint-related issues compared to patients with primary wear-and-tear arthritis.

Despite these added risks, many patients see significant benefits. If you undergo total knee replacement, you can expect meaningful improvements in both your pain levels and daily function. Your doctor will likely report similar positive changes in their assessments. Total hip replacement also offers strong results. Most patients with inflammatory arthritis experience reduced pain and better mobility that matches the outcomes seen in patients with wear-and-tear arthritis. Even after ankle replacement, you should see functional improvement from your starting point, though your final scores might be slightly lower than those with other arthritis types.

Long-term results vary by joint. Elbow replacements tend to last well initially, but you may need revision surgery more often than someone without inflammatory arthritis. Wrist replacements can provide good alignment and comfort for many years, though some implants may eventually fail over a long period. Hand surgery is generally safe even if you continue your biologic medications, with no significant increase in wound healing problems.

If you do not pursue surgical intervention, the condition tends to persist and progress. Joint damage often continues, and bone health may decline, especially if you also have osteoporosis. Without treatment, you are likely to experience ongoing pain and reduced function. Surgical management offers a clear path to restoring movement and reducing pain, but it requires careful planning to handle the unique risks your condition presents. Your doctor will tailor your care to address these specific challenges and help you achieve the best possible quality of life.

## When to see someone

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See your GP if you have persistent pain that does not improve with rest. Ask for a specialist review if you notice weakness or instability in your joints. Seek help if your joints lock or give way during use. Contact your doctor if symptoms interfere with your sleep or work. Sudden worsening of your condition is also a reason to seek care. Be aware that chronic inflammation in areas like the ankle may cause intermittent symptoms that go unrecognized for months or years. Early evaluation helps manage these changes effectively.

## In more depth

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This section steps up to a more detailed, student-level explanation. It isn't needed to manage the condition, but if you're curious about *why* it damages joints and how modern drugs target it, read on.

### AN AUTOIMMUNE ATTACK ON THE JOINT LINING

Unlike osteoarthritis (a mechanical wearing of cartilage), rheumatoid and related inflammatory arthritis is an **autoimmune disease**: the immune system mistakenly attacks the body's own **synovium**, the thin lining of the joint. The synovium becomes inflamed and thickens into an aggressive, invasive tissue called **pannus** that creeps over and digests cartilage and bone.

### THE CYTOKINE MESSENGERS – AND WHY “BIOLOGICS” WORK

The inflamed synovium pours out chemical messengers (**cytokines**), especially **TNF** and **IL-6**, which drive the inflammation, pain and swelling. This is the key to modern treatment: **biologic** drugs are designed to block these exact messengers (anti-TNF, anti-IL-6) or the immune cells that produce them, precision tools that switch off the specific signals driving the disease.

### RANKL AND BONE EROSIONS

The inflammation also cranks up **RANKL**, the very switch that activates bone-dissolving osteoclasts (see [how bone heals and remodels](#)). Driven by RANKL, osteoclasts eat into the bone at the joint margins, producing the characteristic **erosions** seen on X-ray. Because that bone loss is largely irreversible, controlling the inflammation early, before erosions form, is the single most important goal.

### A WHOLE-BODY DISEASE

Because the problem is a systemically activated immune system, inflammatory arthritis is more than a joint condition: it can cause fatigue and affect the eyes, lungs, blood vessels and heart. That's why it's managed as a whole-body condition, not just a joint problem.