

There are several types of arthritis. Some kinds of arthritis are caused by trauma or over-use. Rheumatoid arthritis is different. Rheumatoid arthritis is caused by inflammation in the joint. This inflammation breaks down cartilage, which is the smooth lining of joints. When the cartilage breaks down, the bone becomes exposed. Bone does not slide easily over bone, so these joints become stiff and painful.

The inflammation of rheumatoid arthritis can also cause swelling. Swelling stretches the tissue that holds bones together, called ligaments. When ligaments stretch, they become loose and cause the joints to be unstable. Inflammation also affects tendons, which are the rope-like structures linking muscles to bones. When tendons become inflamed, they can stretch out or break. This can result in sudden finger motion loss.

Rheumatoid arthritis affects the whole body. This is why patients with rheumatoid arthritis complain of pain in multiple joints. Patients usually have pain in joints on both sides of the body. Rheumatoid arthritis usually involves the wrist and joints of the fingers (see Figure 1).

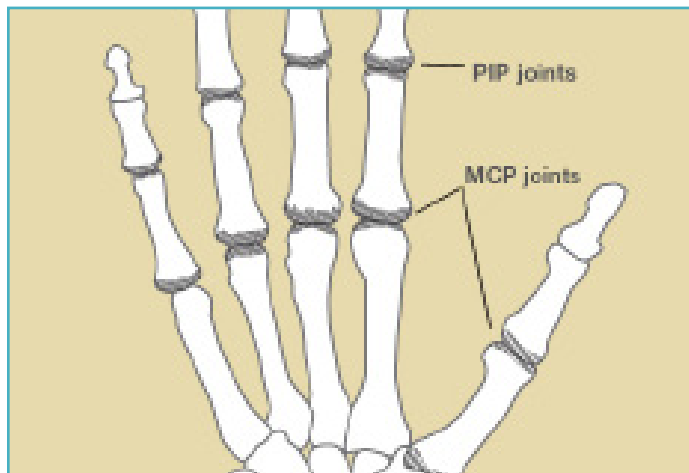


Figure 1: Joints affected by rheumatoid arthritis

Signs and Symptoms

Like other kinds of arthritis, patients with rheumatoid arthritis may have stiff joints. These joints can feel swollen or painful. They are often on both sides of the body. In rheumatoid arthritis, some joints may be more swollen than others. Rheumatoid arthritis also causes swelling of the fingers. They may look sausage-shaped. Other symptoms of rheumatoid arthritis of the hand and wrist include:

- A soft lump over the back of the hand that moves when lifting the fingers up

- A creaking sound during movement
- Fingers shifting toward the pinky finger (see Figure 2)
- Swelling and inflammation of the tendons that bend the fingers.
- A clicking sound when moving the fingers
- Finger getting stuck as it bends
- Numbness and tingling in the fingers
- Inability to straighten or bend certain fingers or the thumb
- A change in the shape of the fingers (Boutonnière Deformity and Swan-Neck Deformity (see Figure 3))

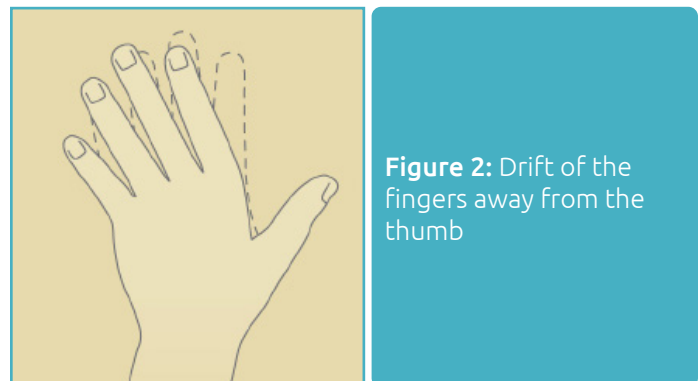


Figure 2: Drift of the fingers away from the thumb

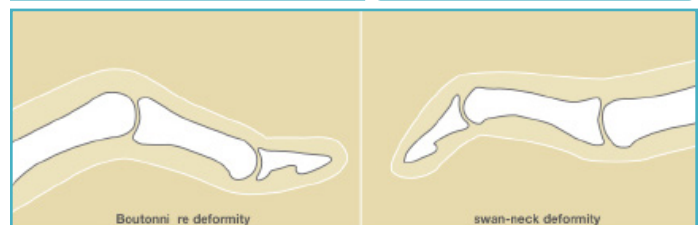


Figure 3: Boutonnière and swan-neck finger deformities

Diagnosis

To diagnose rheumatoid arthritis, your doctor will examine your joints. He/she will do a full physical exam to look for other signs, symptoms or problems. There may be joints that don't currently hurt but could be starting to be affected. Your doctor will assess the impact of the arthritis on your life and activities. The appearance of the hands and fingers helps to diagnose this type of arthritis.

X-rays will show certain characteristics of rheumatoid arthritis. These include narrowing of the joint space or erosions of the bone. If your doctor suspects rheumatoid arthritis, he or she may obtain blood tests to suggest the diagnosis. Some common labs that are ordered include erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP). These tests measure for any inflammation in the body. Some other tests include rheumatoid factor and anti-CCP antibody. These are more specific to rheumatoid

arthritis. Other tests such as antinuclear antigen (ANA) or Lyme's disease tests may be ordered to ensure something else is not causing the joint swelling or pain.

Treatment

Rheumatoid arthritis is usually treated with medication. Typically, medications for this condition are prescribed by your primary care provider or a rheumatologist. There may be both oral and injectable medications. Some are considered disease-modifying antirheumatic drugs (DMARDs). Many of these medications are powerful in reducing inflammation and protecting the joints against irreversible injury. However, since they often act on the immune system, they have side effects that may put you at risk of infection. They must be monitored carefully by your health care provider. They are used when symptoms are severe and multiple joints are affected.

Steroid injections (also known as a cortisone shot) are sometimes helpful to manage a "flare" of rheumatoid arthritis when the new pain is limited to one or a few joints.

Surgery may be needed to relieve pain or improve function, but it is not needed in all cases of rheumatoid arthritis. Surgery is often used when medications have failed and the joint is chronically painful, stiff, deformed, or a tendon has ruptured. Less patients require surgery for rheumatoid arthritis now that better medications exist. By using medications prescribed by your doctor and treating this condition early, it often helps reduce the chance you will need surgery. Your rheumatologist and hand surgeon will work together to determine if and when surgery is needed. Surgery can be very effective to fuse or replace a joint or repair a tendon.