

Rheumatoid Arthritis

Rheumatoid arthritis, otherwise known as RA, is a disease that causes joint pains and swelling. It primarily involves inflammation of the lining of the joints but can also involve internal organs, such as the eyes, the lungs, and the heart.

RA is a chronic disease, which means it lasts indefinitely. Many people with RA note that their arthritis symptoms change over time. Sometimes people with RA will notice their disease is more active and sometimes they will notice their disease is less active. Early diagnosis and treatment is essential for the prevention of many of the complications of RA. In fact we now know that there is a window of opportunity in the first three to six months of the first RA symptoms, to place people in clinical remission.



What are some of the symptoms of RA?

Common symptoms include:

- Achy or painful joints
- Morning stiffness of the joints
- Stiffness after periods of inactivity
- Joint swelling

However, it is important to remember that the disease is not always a joint disease. Sometimes it actually reflects the presence of an underlying autoimmune disorder. An autoimmune disorder is when the body's immune system attacks itself. This attack can initially occur in the joints, but it also can affect nearly every other organ system in the body.

Rheumatoid arthritis principally affects the joints, causing symmetric pain, stiffness, swelling and limitation in the motion and function of multiple joints. Though joints are the principal body parts affected by RA, inflammation can develop in other organs as well. If left untreated or if it is unresponsive to therapy, inflammation and joint destruction lead to deformity, loss of physical function and significant disability in addition to increased risk of mortality.

Other organs that may be affected by systemic autoimmune diseases include:

- eyes (uveitis or scleritis)
- lungs (interstitial lung disease)
- kidneys (glomerulonephritis)
- blood vessels (vasculitis)
- heart (pericarditis)
- nerves (mononeuritis multiplex).

Who gets rheumatoid arthritis?

RA is a common disease. More than two million Americans have RA. People of all races and ethnic backgrounds get RA. Approximately 75 percent of people with the disease are women. It can occur at any age, however, RA often begins when people are between the ages of 30 and 60.

What causes RA?

The cause of RA is not known. Scientists have learned that there are both genetic and environmental components to developing the disease. In other words, while there are certain genes associated with RA, there are many people with RA who do not have any specific genetic tendency for the disease. This means that something else, besides a person's genetic make-up, is needed to get the disease.

In the last decade, we have significantly increased our knowledge of the underlying pathophysiology of RA, and many treatment options have been developed. Treating people appropriately as early as possible is key to preventing further damage.

How is RA diagnosed?

It is now widely accepted that a "therapeutic window of opportunity" exists for people with RA and that the disease is much more amenable to treatment within this window. Thus, a person with suspected RA should be rapidly evaluated, including a detailed history, physical exam, bloodwork, and joint X-ray to confirm the diagnosis so that appropriate treatment can be started within weeks to prevent further damage. It is often difficult to diagnose rheumatoid arthritis (RA). A specialist in RA (known as a rheumatologist) is usually required to establish the diagnosis.

The diagnosis of RA is made based on the careful analysis of many factors. A thorough history and physical examination are essential for the diagnosis. The typical symptoms of RA are that of a chronic (longer than six weeks), fixed, symmetric inflammatory polyarthritis affecting most commonly the small joints of the wrists, hands and feet. It is recommended that general practitioners do not delay the referral to rheumatologists when they see one or more of the following symptoms: positive hand and feet squeeze test, three or more swollen joints or morning stiffness that lasts 30 minutes or more.

Certain laboratory studies can be helpful when considering the diagnosis. It is important to know that the diagnosis cannot be made based on any specific blood test. Some blood tests are helpful by ruling out other diseases that may have similar features as RA. X-rays are often helpful when considering the diagnosis of RA and to look for any signs of joint destruction.

How is RA managed?

The management of RA has dramatically improved over the past 25 years. Early recognition of the disease is essential to allow for early treatment for people with RA. While there is no cure for RA, it

can be managed.

The mainstay of treatment in RA consists of pain control and medication to prevent any further damage to the joints and the other organs. The treat-to-target is the most accepted treatment approach for people with RA, the goal being to reach the target of remission or low disease activity and thus to obtain the best outcome for the person with RA.

There are many medication options for people with RA. Anti-inflammatory medications, such as non-steroidal anti-inflammatory drugs (such as ibuprofen) and corticosteroids (such as prednisone), are often helpful in relieving the pain associated with RA and improving joint swelling and stiffness.

Specific disease-modifying anti-rheumatic drugs (known as DMARDs) are the mainstay of RA treatment. Examples include methotrexate, sulfasalazine, azathioprine and leflunomide. These work by modifying the body's immune system and reducing the inflammation as a result. If the remission or low disease activity is not attained, or if the person with RA has an extra-articular manifestation of RA, step up therapy is offered, with, most commonly, the addition of a biologic agent or small molecule to the DMARD. These newer medications target even more specific aspects of the immune system and include infliximab, etanercept, adalimumab, tocilizumab and tofacitinib. The list of new medications available for people with RA keeps growing.

Each DMARD and biologic agent has its own side effect and toxicity profile and often requires regular blood testing and clinical monitoring to ensure safety.

In addition to medical therapy for RA, many people benefit from physical therapy and rehabilitation. Under the guidance of rehabilitation therapists, people with RA often learn how to appropriately rest, exercise, strengthen and maintain joint and muscle function.

Visit our website for more information about support groups, clinical trials and lifestyle information.

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