

15 Rheumatoid Arthritis

An educational service of NetCE

Ask Your Patients...

"Do you have a history of rheumatoid arthritis in your family?"

If Your Patient Asks...

"Do I have arthritis?"

UNDERSTAND the problem

Rheumatoid arthritis (RA) is a chronic disease characterized by inflammation of synovial tissue that can lead to long-term damage of the joint, resulting in chronic pain, loss of function, and disability. It can also affect other organs such as the eyes, heart, and lungs. The course and severity of the illness vary considerably, and the disease tends to progress over time, with the occurrence of intermittent disease flares.

One in five adults in the United States report having doctor-diagnosed arthritis, and between 2010 and 2012, 50% of adults 65 years or older reported an arthritis diagnosis.¹ There are significant costs associated with RA, and these arthritic-related disease costs continue to increase. In 2003, the total cost attributed to arthritis and other rheumatic conditions in the United States was \$128 billion.²

WHO is at risk

RA can occur at any age, but onset before the age of 35 years in men is rare. Juvenile RA is less common but has an onset before 16 years of age and is associated with a more severe form of the disease. The overall prevalence of arthritis has consistently been higher among women than men, and women are twice as likely as men to develop RA.³

The prevalence of arthritis has been found to be higher in the non-Hispanic white population compared with the non-Hispanic black, Hispanic, and Asian/Pacific Islander populations.⁴ In contrast, the prevalence has been higher in the American Indian/Alaska Native population and individuals of multiple races than in the white population.⁴

Although RA has a clear genetic component, only about 1 in 25 white individuals with the so-called shared epitope develop RA.⁵ RA appears to require the complex interaction of genetic and environmental factors with the immune system and ultimately in the synovial tissues throughout the body. Environmental factors that have been linked to RA include infection, smoking, hormones, and stress.

WHAT are the signs and symptoms

Pain and stiffness in multiple joints are the primary characteristics of RA; morning stiffness lasting more than one hour and symptoms lasting six weeks or longer are good indicators of RA. The most commonly involved joints are the wrist joints and the proximal interphalangeal and metacarpophalangeal joints. Other common symptoms of RA include fatigue, weakness, generalized muscular aches, and anorexia.⁶ Findings on general physical examination are normal except for an occasional low-grade fever and a slightly elevated pulse rate.

Approximately 46% of individuals with RA have extra-articular manifestations, the most common of which is rheumatoid nodules, followed by pulmonary fibrosis, dry-eye syndrome, and anemia of chronic disease.⁶ Rheumatoid nodules are soft, poorly delineated subcutaneous nodules, and they also occasionally affect internal organs such as the pleura, sclera, vocal cords, and vertebral bodies.⁶ Other frequently occurring extra-articular manifestations include pericarditis, pleuritis, vasculitis, cervical myelopathy, and neuropathy.

The recommended serologic testing involves a rheumatoid factor and an anti-citrullinated protein antibody.⁷ A positive rheumatoid factor has long been known as an indicator of RA, and studies have shown that this test is positive in approximately 70% to 80% of people with the disease.⁵

HOW it is treated

The primary goal of treatment for RA was once to alleviate symptoms, but the advent of disease-modifying drugs as a standard of care has shifted the focus to remission or the prevention of further joint damage. Treatment goals are to preserve the structural integrity of the joint, enhance function and quality of life, minimize pain and inflammation, and control systemic complications.⁸ These goals are achieved through a combination of disease-modifying drugs, anti-inflammatory agents, and nonpharmacologic measures.

Surgery is sometimes indicated when medical treatment options fail. In addition, treatment of complications or comorbidities associated with RA may be necessary. Close follow-up is needed for individuals with RA to evaluate response to treatment, ensure control of symptoms, and monitor for treatment side effects and disease-related comorbidities.⁸

WHERE to find resources

Education and self-management are valuable components of an overall treatment plan for a chronic illness such as RA. Studies have demonstrated that patient education improves function, patients' global assessment, adherence to the treatment plan, and psychological status.⁹ The following websites provide patient education materials and tools for patient teaching.

American Autoimmune Related Diseases Association, Inc.

<https://www.aarda.org>

American College of Rheumatology

<https://www.rheumatology.org>

Arthritis Foundation

<https://www.arthritis.org>

National Institute of Arthritis and Musculoskeletal and Skin Diseases

<https://www.niams.nih.gov>

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