Rheumatoid Arthritis

What is rheumatoid arthritis?

Rheumatoid arthritis (RA) is a chronic autoimmune disease that causes stiffness, pain, loss of mobility, inflammation, and erosion (deterioration) in the joints. It usually affects multiple joints symmetrically, the hand and wrists most commonly, but also elbows, neck, shoulders, hips, knees, and feet. Other symptoms include fatigue, fever, the development of nodules under the skin, especially at the elbows, and a sense of not feeling well (malaise). Patients with RA may develop anemia, systemic complications, and may have other co-existing autoimmune disorders and symptoms, such as the dry eyes and mouth associated with Sjögren syndrome.

Rheumatoid arthritis can affect anyone at any age, but it usually develops between the ages of 30 and 50, and 70% of those affected are women. According to the National Institutes of Health, more than 1.3 million people in the United States have RA. Left untreated, RA can shorten a person's lifespan and can, within a few years, leave many of those affected too disabled to work. The course of RA and its prognosis are variable. It may develop and progress slowly or rapidly. It may go into remission in some people and in a few it may go away. Pregnant women with RA frequently have decreased symptoms during their pregnancy and worsened symptoms after giving birth.

RA is different from osteoarthritis, in which joint tissue wears down from sports or injuries. RA usually affects joints in a balanced way—if one knee is affected, the other knee also is affected. The disease may be partly inherited through genes, but other factors are probably at work, including some kind of a trigger for the gene, perhaps bacteria or viruses. The disease is not contagious, however. Some scientists also think that changes in certain hormones may promote RA in people with certain genes who have been exposed to the triggering agent

Testing

In addition to clinical evaluation involving a discussion of symptoms and a physical exam, laboratory and non-laboratory testing is often done to help diagnose rheumatoid arthritis, to distinguish it from other forms of arthritis and conditions with similar symptoms, and to evaluate its severity. Testing can also be used to monitor the condition, its potential complications, response to Treatment, and to monitor for potential side effects associated with some treatments.

Laboratory Tests

- Rheumatoid factor (RF) – used to help diagnose RA; it is eventually present in significant concentrations in most people with RA but can also be present in other conditions and in a small percentage of healthy people.
- Cyclic Citrullinated Peptide Antibody (CCP) – a relatively new test that may be used to help diagnose RA, especially early in the disease and in patients who are RF negative.

- Erythrocyte sedimentation rate (ESR) – this test shows the presence of inflammation in the body and the activity of the disease. It is used to help diagnose RA and to evaluate and monitor the condition. ESR will be increased in RA but not in osteoarthritis.
- C-reactive protein test (CRP) – this test also indicates inflammation and tests for the activity of the disease. It may be used to help diagnose RA and to evaluate and monitor the condition. An increased level of CRP occurs in RA but not in osteoarthritis.
- Complete Blood Count (CBC) – this is a group of tests used to help evaluate the person's red and white blood cells and hemoglobin to help evaluate and monitor the condition and complications such as anemia and/or a decreased white blood cell count.
- Comprehensive Metabolic Panel (CMP) – this is a group of tests that may be used to help evaluate and monitor kidney and liver function.

Non-Laboratory Tests

- X-ray – used to help diagnose RA and monitor joint damage but will not usually show significant changes early in the disease.
- Ultrasound and MRI – may be used to help detect changes in the joints earlier in the disease.