

Rheumatoid Arthritis: An Overview

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INTRODUCTION

Rheumatoid arthritis is a chronic, progressive and disabling autoimmune disease. It causes inflammation, swelling and pain in and around the joints that affects the other body organs. Rheumatoid arthritis is a chronic inflammatory disorder that may affect the joints. The common signs and symptoms of rheumatoid arthritis may include joint stiffness, loss of appetite, fatigue, fever, swollen joints, weight loss, weakness, etc. About 40% of people may also experience the signs and symptoms that don't involve the joints, some areas in your body may be affected such as skin, eyes, lungs, bone marrow, blood vessels, nerve tissue, salivary glands etc. There are four stages of rheumatoid arthritis known as synovitis, pannus, fibrous ankylosis, and bony ankylosis.

Two types of Rheumatoid arthritis are: Seropositive and Seronegative RA, Juvenile RA is another type that only affects the children.

- **Seropositive RA:** A seropositive RA diagnosis refers to positive anti-CCP and/or RF blood tests. It is considered to be more progressive and severe than seronegative RA. It is associated with more joint damage, development of vasculitis, lung disease, rheumatoid nodule etc
- **Seronegative RA:** A seronegative RA diagnosis refers to anti-CCP and RA is absent, is less common than the seropositive type. The diagnosis of seronegative RA is based on the symptoms of the condition, including morning stiffness, joint stiffness, swelling, pain, and symmetrical involvement of multiple joints
- **Juvenile RA:** It is often referred to as Juvenile Idiopathic Arthritis (JIA), is a form of RA that affects children aged 16 and under. Children with JIA may also have fevers, rash, and swollen lymph nodes

DESCRIPTION

The etiology of RA is multifactorial. Genetic susceptibility is an evident in familial clustering and monozygotic twin studies, with 50 percent of RA risk attributable to genetic factors. RA is categorized by inflammatory pathways that lead to proliferation of synovial cells in joints. Subsequent pannus formation may lead to underlying cartilage destruction and bony erosions.

Over production of pro-inflammatory cytokines, including Tumor Necrosis Factor (TNF) and interleukin-6, drives the destructive process.

If a person has a diagnosis of RA, the doctor may refer them to known as a rheumatologist. Treatment will aim to prevent flares and reduce their severity if they occur, relieve pains, minimize any loss of function caused by pain and joint damage, reduce inflammation to the joints and prevent damage to the joints. Factors that may increase your risk of rheumatoid arthritis include age, sex, family history, excess weight and smoking. Rheumatoid arthritis may increase your risk of developing includes osteoporosis, dry eyes and mouth, infections, abnormal body composition, lymphoma, carpal tunnel syndrome, heart problems and lung diseases. A Mediterranean diet is a good option for many people with RA. If you find any severe pain in muscles and joints then massage with sweet-smelling oils to reduce the stress, exercise and physiotherapy, take supplements containing probiotics etc. This diet focuses on inflammation-fighting foods such as plenty of fresh fruits and vegetables, olive oil, whole grains, nuts and legumes. Iron rich foods into their diet including eggs, lean meat, leafy greens, fortified breakfast cereals etc.

Effective home remedies for rheumatic arthritis are:

- **Stretching:** Stretching the muscles around the affected joints can help to reduce discomfort and pain associated with rheumatoid arthritis
- **Exercise:** Light, dynamic and low stress types of exercises like yoga, swimming and cycling can benefit the people with RA
- **Heat and cold:** Smearing the heating or cooling packs can help to diminish the discomfort in affected area
- **Managing stress:** Reducing physical and psychological stress can help people with RA and decrease flare-ups
- **Probiotics:** Foods like yogurt and pickles are rich in probiotics. Taking probiotic supplements every single day for 2-3 months has been shown to decrease inflammation and pain. Probiotics can also help to improve digestive health and supplement immunity.

Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) are available Over The Counter (OTC) from pharmacies. Long-term use and

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high doses may lead to side effects may include bruising, high blood pressure, gastric ulcers, kidney and liver problems. Corticosteroids reduce the pain and inflammation and help slow joint damage, but they cannot cure RA. Disease Modifying Anti-Rheumatic Drugs (DMARDs) may cause side effects include liver damage, abnormal blood counts, increased risk of infections, hair loss, immune-related disorders, nausea, mouth ulcers, loose stool, stomach upset. TNF-alpha inhibitors can decrease the pain, morning stiffness, and swollen or tender joints. The common DMARDs include methotrexate, hydroxychloroquine, sulfasalazine, leflunomide. Anti TNF biologics, used to stop inflammation may include adalimumab, certolizumab, etanercept. Physical therapy may help to keep your joints flexible. Assistive devices like beaded seat covers in cars and book stands to give the hands a break can reduce stress on joints when going about daily tasks or enjoying unhurried activities.

Rheumatoid arthritis surgery may possibly involve one or more of the following procedures:

- **Synovectomy:** Surgery to remove the inflamed lining of the joint can help to reduce pain
- **Tendon repair:** Inflammation and joint damage may cause tendons around your joint to loosen or rupture
- **Joint fusion:** It may be recommended to stabilize the joints
- **Total joint replacement:** In this, surgeon removes the damaged

CONCLUSION

RA is less diagnosed in parous women than in nulliparous women. A doctor will use blood tests, X-rays and ultrasounds to determine if you have RA. The blood tests look for high levels of inflammation or specific antibodies present in people with RA. Educate the people with RA to better understand the nature of RA. These programs have been shown to reduce pain, depression, and disability in people with RA and allow them to gain some control over their illness.