

September 13, 2019

RHEUMATOID ARTHRITIS



Written By: Dr. Neha S Ramjuttun

What is Rheumatoid Arthritis (RA)? Rheumatoid arthritis is an autoimmune disease that causes chronic inflammation of the joints. This occurs when the body's immune system mistakenly attacks the joints. When the body's immune system attacks its own body tissues, it results in inflammation causing the synovium to thicken which eventually causes swelling and pain around the joints.

Statistics: Rheumatoid arthritis affects more than 1.3 million people in USA and up to 1% of the world's population.

Etiology: Since rheumatoid arthritis is an autoimmune disease, there is no known specific cause of the disease but genetics can play a role.

What are the risk factors? The risk factors include: women; family history; can occur at any age but most common over 60 years old; obesity; smoking; environmental exposures such as silica or asbestos; stress; previous bacterial or viral infection; gut bacteria; and a study also found that a type of bacteria in milk and beef may cause RA in those with genetic predispositions.

What are the signs and symptoms? A person with rheumatoid arthritis experiences the following manifestations: pain/tenderness and swelling of one or more joints; joint stiffness; joint deformity; joint warmth and redness; loss of joint function; symmetrical joint involvement; fatigue; weakness; fever; loss of appetite; and depression. There are two types of deformities that occur with rheumatoid arthritis: boutonniere deformity and swan neck deformity.

How is rheumatoid arthritis diagnosed? In order to diagnose rheumatoid arthritis, some blood tests such as erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), rheumatoid factor and anti-cyclic citrullinated peptide (anti-CCP) antibodies are performed. In addition, x-rays are also performed. The diagnostic criteria for rheumatoid arthritis are the following:

- Morning stiffness for more than 30 minutes.
- Joint pain, swelling and stiffness for more than 6 weeks.
- Swelling of 3 joints for 6 weeks.
- Symmetric joint swelling for 6 weeks.
- Rheumatoid factor or anti-CCP.
- CRP or ESR.
- Rheumatoid nodules formation.

What is the treatment? The treatment involves medications such as nonsteroidal anti-inflammatory drugs (NSAIDs), corticosteroids, disease-modifying antirheumatic drugs (DMARDs) and TNF alpha-inhibitors. A common example of DMARD is methotrexate. Occupational therapy can ease the pain of affected joints. Surgery is recommended if

conservative treatment does not help; to repair damaged joints; or to correct any deformities. Some surgical procedures include - tendon repair, synovectomy, total joint replacement and joint fusion. Home remedies can help alleviate rheumatoid arthritis and some include - fish oil, probiotics, turmeric, curcumin and Indian frankincense. There is also some temporary relief when applying hot or cold compress on the tender sites. Additionally, exercise, healthy diet and adequate rest also benefits.

Are there any complications associated with RA? There is a high risk of developing heart disease and obesity when you have rheumatoid arthritis. Other conditions that you may develop are carpal tunnel syndrome, tendon rupture, cervical myelopathy, vasculitis, inflammation of other parts of the body and more prone to infections.

Rheumatoid arthritis is an autoimmune disease that cannot be prevented but it is still important to maintain a healthy lifestyle. If you experience pain and/or swelling of one or more joints, it is necessary to see your family doctor immediately.

References:

1. Brazier, Y. (2018). *What is rheumatoid arthritis?* [online]. MedicalNewsToday. Available at: <https://www.medicalnewstoday.com/articles/323361.php> [Accessed 22 Mar. 2019].
2. Brazier, Y. (2018). *What are the 10 risk factors for rheumatoid arthritis?* [online]. MedicalNewsToday. Available at: <https://www.medicalnewstoday.com/articles/323356.php> [Accessed 22 Mar. 2019].
3. Freeman, J. (2018). *RA Diagnosis: What Criteria are used to Diagnose Rheumatoid Arthritis?* [online]. RheumatoidArthritis. Available at: <https://www.rheumatoidarthritis.org/ra/diagnosis/> [Accessed 22 Mar. 2019].
4. Johnson, J. (2018). *Natural remedies for rheumatoid arthritis?* [online]. MedicalNewsToday. Available at: <https://www.medicalnewstoday.com/articles/315492.php> [Accessed 22 Mar.2019].