

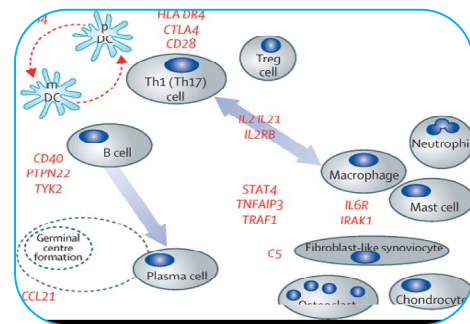


“STUDIES ON CHARACTERISTICS OF RHEUMATOID ARTHRITIS, THERE SYMPTOM PROFILES AND TEST”

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ABSTRACT

Rheumatoid arthritis is characterized by the presence of auto antibodies known as rheumatoid factors and anti-citrullinated peptide antibodies. Rheumatoid factors have been long recognized as a feature of many patients with Rheumatoid arthritis. Rheumatoid arthritis is a chronic symmetric polyarticular joint disease that primarily affects the small joints of the hands and feet. The inflammatory process is characterized by infiltration of inflammatory cells into the joints, leading to proliferation of synoviocytes and destruction of cartilage and bone.



KEYWORDS : Rheumatoid arthritis, antibodies, disease, hands and feet.

INTRODUCTION

Rheumatoid arthritis is a chronic autoimmune disorder characterized by systemic features and joint involvement which affects 1% of the world's adults. It can lead to significant morbidity and mortality. Initially, the diagnosis of Rheumatoid arthritis was mostly based on clinical manifestations. However, it is often difficult to diagnose Rheumatoid arthritis in very early phases of the disease and in many cases, irreversible damage has occurred by the time diagnosis was confirmed. Therefore, laboratory tests which are sensitive and specific for Rheumatoid arthritis and can identify early in the disease course are required for diagnosis and intervention. Vitamin D might be one of the environmental factors relevant with Rheumatoid arthritis. Etiology of Rheumatoid arthritis is not known clearly. Role of Vitamin D deficiency in the pathogenesis of Rheumatoid arthritis was the interest of the study. The aim of the present study was to estimate serum calcium, phosphorus, alkaline phosphatase, and 25-hydroxy, Vitamin D levels in Rheumatoid arthritis patients and also to find the association between Vitamin D and Rheumatoid arthritis, as well as the relationship of Vitamin D with disease activity score in Rheumatoid arthritis patients.

A person with Rheumatoid arthritis may feel intense pain in their joints during flares. This may feel like sustained pressure, a burning sensation, or a sharp pain. However, people with Rheumatoid arthritis may also experience periods of remission when they feel few to no symptoms. In addition to causing pain in the joints, Rheumatoid arthritis can affect the whole body.

MATERIAL AND METHODS :

Erosions of bone and destruction of cartilage, occur rapidly and may be seen within the first 2 years of the disease, but continue to develop over time. These anatomic changes result in limitations in range of motion, flexion contractures, and subluxation (incomplete dislocation) of articulating bones. Typical deformities include ulnar deviation of the fingers at the MCP joints, hyperextension or hyperflexion of the MCP and PIP joints (swan neck and boutonniere deformities), flexion contractures of the elbows, and subluxation of the carpal bones and toes (hammer toes and cock up deformities). Radiological findings early in the disease may show nothing other than soft tissue swelling. Thereafter, periarticular osteopenia may develop. With progression of their disease, narrowing of the joint space is caused by loss of cartilage, and juxta-articular erosions appear, generally at the point of attachment of the synovium. In end-stage disease, large cystic erosions of bone may be seen.

No laboratory test will definitively confirm a diagnosis of rheumatoid arthritis. However, the information from the following tests contributes to diagnosis and management.

- Complete blood count (CBC)
- Comprehensive metabolic panel (CMP)
- Rheumatoid Factor (RF)
- Antibodies to citrullinated peptides including anti-CCP
- Erythrocyte Sedimentation Rate (ESR)
- C-reactive protein (CRP)

The blood count shows a mild anemia in approximately 25 to 35% of patients with Rheumatoid arthritis. The white cell count is usually normal in patients with rheumatoid arthritis, but can be mildly elevated secondary to inflammation, and can also be very low in a subgroup of patients with Felty's syndrome. Similarly, the platelet count is usually normal but thrombocytosis occurs in response to inflammation. Chemistry tests are usually normal in rheumatoid arthritis with the exception of a slight decrease in albumin and increase in total protein reflecting the chronic inflammatory process. Renal and liver function are important to check before beginning treatment and are followed over time with many medications.

A positive rheumatoid factor is present in 70-80% of patients with Rheumatoid arthritis. A positive Anti-CCP is a more specific marker for Rheumatoid arthritis and is found in similar proportions of patients over the course of disease. High levels of Anti-CCP also appear to be linked to a greater severity of the disease.

Measures of inflammation are often, but not always increased in Rheumatoid arthritis. The erythrocyte sedimentation rate (ESR) is usually elevated in patients with Rheumatoid arthritis and in some patients is a helpful adjunct in following the activity of the disease. The C-reactive protein (CRP) is another measure of inflammation that is frequently elevated, and improves with control of disease activity. Testing for hepatitis B and C and testing for tuberculosis are commonly done as part of an initial evaluation. Baseline X-Rays of the hands, feet, and other affected joints are common at initial evaluation, and sometimes a baseline chest X-Ray is obtained.

RESULT AND DISCUSSION:

Immune system infections, for example, Rheumatoid joint inflammation are frequently portrayed by the presence of autoantibodies. Rheumatoid element isn't explicit for Rheumatoid joint inflammation and might be available in patients with different infections, like hepatitis C, and in sound more seasoned people. Hostile to citrullinated protein immunizer is more unambiguous for Rheumatoid joint inflammation and may assume a part in sickness pathogenesis. Roughly 50 to 80 percent of people with Rheumatoid joint pain have rheumatoid component, hostile to citrullinated protein counter acting agent, or both. Patients with Rheumatoid joint inflammation might have a positive antinuclear counter acting agent test result, and the test is of prognostic significance in adolescent types of this infection. C-receptive protein levels and erythrocyte sedimentation rate are regularly expanded with dynamic Rheumatoid joint pain, and these intense stage reactants are important for the new Rheumatoid joint

pain arrangement models. C-receptive protein levels and erythrocyte sedimentation rate may likewise be utilized to follow sickness movement and reaction to medicine.

Standard complete blood count with differential and evaluation of renal and hepatic capacity are useful on the grounds that the outcomes might impact treatment choices (e.g., a patient with renal inadequacy or huge thrombocytopenia probably wouldn't be recommended a nonsteroidal mitigating drug. Gentle frailty of ongoing illness happens in 33 to 60 percent of all patients with Rheumatoid joint inflammation, albeit gastrointestinal blood misfortune ought to likewise be considered in patients taking corticosteroids or NSAIDs. Methotrexate is contraindicated in patients with hepatic illness, like hepatitis C, and in patients with huge renal weakness. Biologic treatment, like a TNF inhibitor, requires a negative tuberculin test or treatment for inactive tuberculosis. Hepatitis B reactivation can likewise happen with TNF inhibitor use. Radiography of hands and feet ought to be performed to assess for trademark periarticular erosive changes, which might be demonstrative of a more forceful Rheumatoid joint inflammation subtype.

The average annual incidence in the United States is about 70 per 100,000 annually. Although rheumatoid arthritis may present at any age, patients most commonly are first affected in the third to sixth decades. Occasionally, patients experience an explosive polyarticular onset occurring over 24 to 48 hours. The pattern of symptoms may wax and wane over the course of a day and even from one day to the next. Sometimes "flares" of Rheumatoid arthritis are experienced as an increase in these systemic symptoms more than discrete joint swelling or tenderness. Symmetrical joint swelling is characteristic of rheumatoid arthritis that has been persistent for a period of time. However when only a few joints are affected at the beginning of disease, symmetry may not be seen and should not preclude the diagnosis of Rheumatoid arthritis. Careful palpation of the joints can help to distinguish the swelling of joint inflammation from the bony enlargement seen in osteoarthritis, with the swelling often described as being doughy or spongy in Rheumatoid arthritis in contrast to firm knobby enlargement in osteoarthritis. Swelling of the PIP and MCP joints of the hands is a common early finding. Wrists, elbows, knees, ankles and MTP are other joints commonly affected where swelling is easily detected. Pain on passive motion is a sensitive test for joint inflammation as is squeezing across the MCPs and MTPs. Occasionally inflamed joints will feel warm to the touch. Inflammation, structural deformity, or both may limit the range of motion of the joint. Over time, some patients with Rheumatoid arthritis develop deformities in the hands or feet. Permanent deformity is an unwanted result of the inflammatory process. Persistent tenosynovitis and synovitis leads to the formation of synovial cysts and to displaced or ruptured tendons. Extensor tendon rupture at the dorsum of the hand is a common and disabling problem.

CONCLUSION:

Rheumatoid joint pain is the most ordinarily analyzed foundational provocative joint inflammation. Ladies, smokers, and those with a family background of the illness are most frequently impacted. Rules for analysis incorporate having something like one joint with distinct enlarging that isn't made sense of by another sickness. The probability of a rheumatoid joint inflammation analysis increments with the quantity of little joints included. In a patient with fiery joint inflammation, the presence of a rheumatoid variable or against citrullinated protein immune response, or raised C-receptive protein level or erythrocyte sedimentation rate proposes a finding of rheumatoid joint inflammation. Starting lab assessment ought to likewise incorporate total blood count with differential and evaluation of renal and hepatic capacity. Despite the fact that there's no remedy for rheumatoid joint inflammation, early treatment and backing (counting medication, way of life changes, strong medicines and medical procedure) can decrease the gamble of joint harm and cutoff the effect of the condition. Your treatment will typically include care from your GP and a few distinct trained professionals.

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