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CASE REPORT

Is it really rheumatoid arthritis?

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Abstract

Rheumatoid arthritis; it is an autoimmune disease that usually shows symmetrical polyarticular involvement and positivity for rheumatoid factor and anti-cyclic citrullated peptide can be observed. Patients may not have antibody positivity, but rheumatoid arthritis may be present and these patients are defined as seronegative rheumatoid arthritis. It is expected decrease acute phase reactants levels and disease activity scores of patients who start treatment. It is important to review the diagnosis, especially in patients with seronegative rheumatoid arthritis who do not respond to treatment. In this case report, a patient who was followed up with the diagnosis of seronegative rheumatoid arthritis and was diagnosed with soft tissue tumor in his hand is presented.

Keywords: Physical and Rehabilitation Medicine, Rheumatoid Arthritis, Soft Tissue Neoplasms

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Introduction

Rheumatoid arthritis (RA) is one of the most common autoimmune diseases, affecting approximately 1% of the world's population [1]. It is usually characterized by symmetrical polyarticular involvement, morning stiffness, and inflammatory pain [2]. Rheumatoid factor (RF) and anti-cyclic citrullated peptide (Anti-CCP) positivity are frequently observed in patients [3]. Both RF and anti-CCP negativity is thought to be 10-48% among RA patients and these patients are defined as seronegative RA [4]. In the differential diagnosis, osteoarthritis, other rheumatic diseases with polyarticular involvement, and infectious factors such as hepatitis B virus and chikungunya virus that cause polyarthritis should be considered [5,6]. It is necessary to review the diagnosis, especially in seronegative RA patients who do not respond to treatment. In this case report, a patient who was followed up with the diagnosis of seronegative RA and was diagnosed with soft tissue tumor in his hand is presented.

Case Presentation

A 42-year-old female patient says that she has been followed up with the diagnosis of RA for about 5 years. Therefore, she said that she used methotrexate 10 mg/week subcutan, hydroxychloroquine 400 mg/day, prednisolone 5 mg/day, folic acid 5 mg/week. She applied to us because she was not benefiting from the medications, the swelling in her hand was gradually increasing, and she had bruising on her fingers. There was discoloration on the palmar surface of the 4th and 5th fingers of the right hand, diffuse swelling localized at the proximal and middle phalangeal levels, there was no temperature increase, and the range of motion of the finger joints was slightly limited (Figure 1).

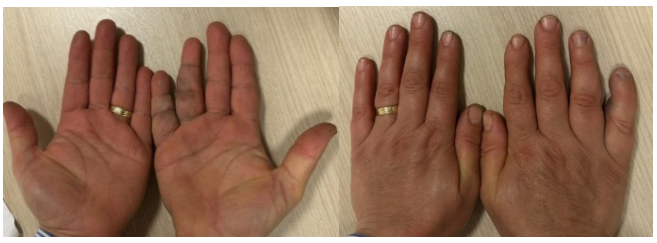

Figure 1. Image of hands and fingers

In laboratory examination, c reactive protein (CRP) was 1.72 mg/L, erythrocyte sedimentation rate (ESR) was 20 mm/h, and no pathological findings were observed in complete blood count (CBC), kidney and liver function tests. RF and anti-CCP autoantibodies were negative. In anteroposterior hand radiographs imaging, soft tissue swellings were observed in the 4th and 5th fingers of the right hand (Figure 2). Disease activity score 28 (DAS28) score was calculated as 2,43. There was no evidence of synovitis in ultrasonography (USG). In contrast-enhanced right hand magnetic resonance imaging (MRI), multiple tubular space-occupying lesions were observed in the soft tissue of the 4th and 5th fingers (Figure 2). The patient's medications were stopped and the patient was referred to hand surgery.

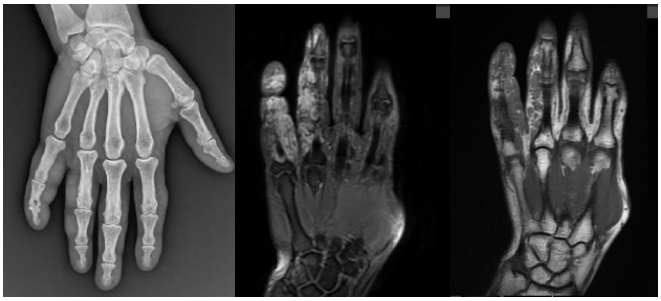

Figure 2. Right hand finger anteroposterior hand radiographs and MRI

Discussion

Swelling, synovitis, and pain in the joints may be observed in RA attacks [2]. In the presence of disease activity, an increase in the level of acute phase reactants and deterioration in CBC parameters are expected [3]. RF and anti-CCP positivity are frequently observed in patients [3]. Erosions can be observed in joints on X-ray imaging [7]. Ultrasonographic examinations during an attack help in diagnosis and can detect the presence of arthritis, synovitis and joint erosion [8]. There are American College of Rheumatology 2010 (ACR2010) classification criteria for RA [9]. According to these criteria, a score of 6 or above supports the diagnosis of RA. Synthetic disease-modifying anti-rheumatic drug (DMARD), biological DMARD and target-sensitive DMARD options are available in treatment [10,11]. Simple disease activity index (SDAI), clinical disease activity index (CDAI) and DAS28 are used to evaluate disease activity and treatment response [12,13].

It is expected that the symptoms will regress and the joint swelling will decrease with treatment. In addition to clinical response, improvement in acute phase reactants levels and CBC parameters is expected

in patients who benefit from treatment. If there is a response in treated patients, it supports the diagnosis. DAS28, CDAI and SDAI scores are expected to decrease in treated patients [12]. Patients may be primary or secondary unresponsive to treatment [11]. Other treatment options may be considered in patients who do not respond to treatment.

In our case, joint involvement was asymmetrical, there was swelling only in the 4th and 5th fingers, and swelling was unrelated to attacks. Contrary to what was expected in RA, there was neither synovitis nor erosion on USG. In addition; findings such as unresponsiveness to treatment, normal acute phase levels, RF and anti-CCP negativity, absence of erosion on x-ray do not match the findings of RA. Patient's ACR2010 score was less than 6. Although there was no treatment response, the DAS28 score was low. Considering the patient's findings, it is thought that symptoms are thought to result from an etiology other than RA. Therefore additional imaging was performed. A soft tissue tumor was detected in the patient's hand during additional imaging. Soft tissue masses in the hand are rarely observed and can be detected through imaging methods in undiagnosed patients [14].

As a result, although RF and anti-CCP positivity is expected in RA patients, concept of seronegative RA causes diagnostic confusion in antibody-negative patients. It is necessary to review the diagnosis and ensure that other diagnoses are excluded, especially in seronegative RA patients who do not respond to treatment.

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