



LETTER TO THE EDITOR

An atypical arthritis case

Atipik bir artrit vakası

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To the Editor,

Rheumatological disorders usually affect joints. Frequently, diseases like rheumatoid arthritis (RA), connective tissue diseases, psoriatic arthritis, osteoarthritis (OA) can influence joints of hand. Mostly, radiocarpal, metacarpophalangeal and proximal interphalangeal (PIP) joints are involved in inflammatory arthritis. Distal interphalangeal (DIP) arthritis is not usually involved except in certain clinical conditions. Primarily, psoriatic arthritis and OA come to mind when DIP joint involvement is seen^{1,2}. Also, occasionally DIP may be affected in advanced gout cases³. Occasionally clinical diagnosis of hand arthritis might be challenging. We report a rapidly progressive atypical distal and proximal interphalangeal (DIP/PIP) joints erosive arthritis accompanied by synovitis and dactylitis.

A 58-year old male patient applied to rheumatology outpatient clinic with pain, swelling, movement limitation in hand fingers compatibly with dactylitis (Figure 1). The patient was a farmer who had a history of overuse. In assessment of the patient, X-Ray of the hands revealed narrowing of the joint spaces in DIP and PIP joints and also erosions in DIP joints (Figure 2a). Initial laboratory findings including erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), blood chemistry, hemogram were normal. Romatoid factor (RF) and anti-cyclic citrullinated peptide (anti-CCP) were negative. Detailed physical examination

including umbilicus, hairy skin, and gluteal area revealed no evidence of psoriatic skin lesion. The patient had no family history of psoriasis or other inflammatory arthritis. He had not any symptom of spondyloarthropathy. Although dactylitis was an atypical presentation for OA, initial evaluation pointed out erosive OA; colchicine, diacerein, prednisolone were commenced. The complaints and findings were not improved with this regime within 3 months.

In following evaluations, increasing in ESR and CRP, positivity of anti-nuclear anticor (ANA) at 1/100 titration and anti-Ro52, shortening in tear break-up time were detected. Because there was no complaint of mouth dryness, we did not perform salivary gland biopsy. MRI revealed DIP and PIP arthritis, tenosynovitis and dactylitis in both hands (Figure 3). 1-year after from the basal hand X-Ray, the erosions in DIP and PIP joints were became more evident (Figure 2b). There was no psoriatic lesion during the follow-up period. With the evidence of inflammatory arthritis, methotrexate (MTX) 10mg/week and hydroxychloroquine (HCQ) treatments were started instead of the previous treatment. The symptoms were controlled with this treatment. After 2 years, this medication regime was stopped because of no symptoms. In the fifth year the patient was presented with skin lesion in bilateral dorsal regions of his forearms. The cutaneous biopsy yielded “tumid lupus erythematosus”, not compatible with psoriasis. The

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final laboratory findings were unremarkable. The patient has been followed up with minimal complaints and without any medication for 3 years.

Clinical diagnosis of hand arthritis may be challenging. Various conditions RA, OA, psoriatic arthritis, reactive arthritis and gout can affect hand joints. In RA, generally DIP joints are spared. In our case, DIP arthritis was definite and seronegative regarding both RF and anti-CCP. Erosive osteoarthritis typically involves DIP, PIP joints and first carpometacarpal (CMC) joint. Typical central location of the erosions forms the classic "gull-wing" appearance⁴. Besides, dactylitis is an uncommon finding in erosive OA. Nevertheless, our patient's overuse his hands can explain dactylitis. However, every individuals whose hands overused do not have dactylitis.

The pattern of distribution in psoriatic arthritis may be that of a symmetric polyarthropathy, or asymmetric oligoarthropathy, with a distal predominance. Dactylitis is also common, results in sausage digit which refers to soft tissue swelling of a whole digit; radiologic examination of a sausage digit demonstrates underlying synovitis and tenosynovitis⁴. But our patient does not have any psoriatic skin lesion during our 6-year follow-up period.

Reactive arthritis have a very similar appearance to psoriatic arthritis however distal lower extremity involvement (knee, metatarsophalangeal joints, ankle) is more prevalent than upper extremity involvement⁴ But the patient did not define any infectious condition which could be related with reactive arthritis. Still, an atypical reactive arthritis may be a possible diagnosis.

Gouty arthritis, most commonly affect metatarsophalangeal joint. This condition can also have an asymmetrical polyarticular distribution. It can affect hand joints included DIP in the later stages of the disease³. Our patient had normal uric acid level and no complaint about lower extremity and also radiologic images were not compatible with gout arthritis.



Figure 1. Swelling of the patient's hand fingers



Figure 2. X-rays of initial examination (a) and after 2 years of follow-up (b). Figure 2a shows narrowing of the joint spaces in distal and proximal interphalangeal joints and also erosions in DIP joints. Figure 2b reveals central erosions and partially ankylosis.

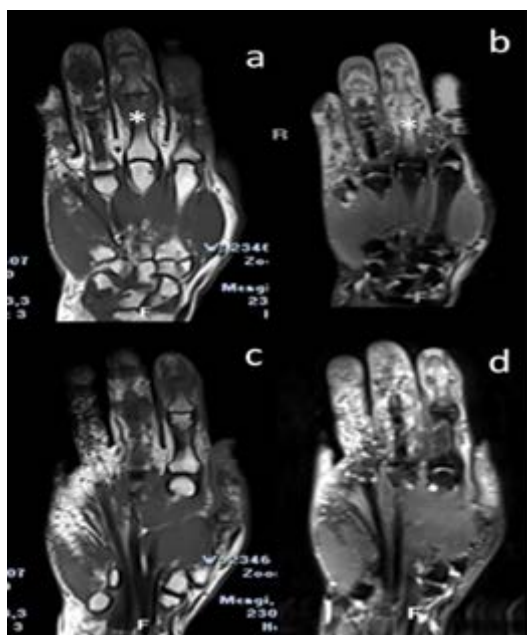


Figure 3. Fig 1a (coronal T1) and Fig 1b (coronal fat sat T2) show DIP arthritis of the third and fourth fingers of the left hand. PIP joint of the third finger is also involved. Bone marrow edema (asterisk) with tenosynovitis and soft tissue swelling reveals dactylitis of the third finger. Fig 1c (coronal T1) and Fig 1d (coronal fat sat T2) show DIP arthritis of the second finger.

The other probabilities were atypical joint involvement related with connective tissue diseases, overlap syndromes or undefined distinct arthritis entity regarding ANA positivity. However erosive arthritis and dactylitis were not in concordance with

systemic lupus erithematosus and other connective tissue diseases.

Although we encounter many patients who use their hands very frequently, this is the first case we saw with severe PIF/DIF synovitis, dactylitis, increased sedimentation and CRP values, and responding DMARDS like methotrexate and HCQ. We consider that report of this case will contribute to the literature.

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