Bilateral Upper Extremity Edema in the Psoriatic Arthritis Case

Ferhat GÖKMEN1, Ayla AKBAL1, Yılmaz SAVAŞ1, Coşkun ZATERİ1, Adem KARACA2, Yusuf Ziya TAN3
1Department of Physical Medicine and Rehabilitation, Onsekiz Mart University Faculty of Medicine, Çanakkale, Turkey
2Clinic of Physical Medicine and Rehabilitation, Muş State Hospital, Muş, Turkey
3Department of Nuclear Medicine, Onsekiz Mart University Faculty of Medicine, Çanakkale, Turkey

Abstract
Psoriatic arthritis (PsA) is a seronegative spondyloarthropathy characterized by peripheral arthritis, enthesis, spondylitis, and psoriasis. Lymphedema arises from the slowing of lymphatic flow because of inflammatory or noninflammatory diseases such as tumors, infections, bursitis, rheumatoid arthritis, and polymyalgia rheumatica. It is commonly encountered in one or more regions of distal extremities. Lymphedema is a rare complication of PsA, and it is commonly seen asymmetrically and in lower extremities. We aimed to report a case, who followed-up with diagnosis with PsA and with complaints of upper extremity swelling and bilateral upper extremity lymphedema diagnosed as a result of the review.

Keywords: Psoriatic arthritis, upper extremity, lymphoedema, anti-TNF alpha

Introduction
Psoriatic arthritis (PsA) is a chronic inflammatory rheumatic disease characterized by psoriasis and arthritis. Its clinical findings include tenderness in joints, pain, swelling, stiffness, dactylitis, and enthesis (1). Lymphedema is the formation of a swelling in a specific region of the body that is secondary to the accumulation of the lymph fluid under the skin due to pathological changes in the lymphatic flow. It commonly occurs in the lower extremities. Moreover, it can be observed on the face, neck, upper extremities, and genital region. The impairment in the lymphatic flow can be primary or secondary. Primary lymphedema is frequently observed in females and in during puberty. Secondary lymphedema occurs because of slowing in the lymph flow due to acquired conditions (2). Lymphedema is a rare extra-articular feature in PsA. In this study, a case followed up with PsA diagnosis and developing bilateral upper extremity lymphedema is discussed with current literature.

Case Report
A 39-year-old female patient who followed up because of PsA diagnosis visited our clinic with complaints of swelling in both hands and forearms and pain. Her medical history revealed that methotrexate therapy for PsA had been initiated 10 years ago (15 mg/week); however, she had discontinued the therapy because her complaints related to joints had decreased. Moreover, because of the occurrence of complaints of diffuse swelling in the left hand and forearm in addition to joint pain a few months after the discontinuation of the therapy, etanercept therapy had been initiated (2×25 mg/week), resulting in a prominent improvement of the swellings of the leg and joint complaints. However, it was found that swellings in the right hand and left forearm had developed again in the patient, whose etanercept therapy had been discontinued because of pregnancy 3 years ago. The physical examination performed at admission to our clinic revealed psoriasis of the scalp, bouton-
niere deformity in the 5th finger of the right hand, fusiform swelling in the 3rd finger of the left hand, and diffuse swellings in the dorsum of the hand and from the wrist to the elbow (Figure 1). Other systemic findings of the patient were normal. In her laboratory tests, hemoglobin was 9.8 g/dL; erythrocyte sedimentation rate was 17 mm/h; C-reactive protein level was 1.02 mg/dL, rheumatoid factor was negative; anti-CCP was negative; and serum liver and kidney function tests were within normal intervals. In direct radiographies, narrowing, erosion, and ankylosis in the carpal bones and in the spaces of the first finger metacarpophalangeal and interphalangeal joints (Figure 2) and bilateral sacroiliitis in the sacroiliac joint (Figure 3) were detected in both the hands. In the medical background of the patient, whose upper extremity arterial and venous Doppler ultrasonography (US) and mammography results were detected to be normal, no history of drug use, axillary surgery or radiotherapy, malignancy, thrombophlebitis, and allergic reaction that could cause edema in the upper extremities was found. Therefore, lymphedema was suspected. In the lymphoscintigraphy performed for the final diagnosis of lymphedema, activity involvement of the hands, forearms, and elbows was detected, which was consistent with lymphedema (Figure 4). The patient, who had been followed up with PsA diagnosis, was again initiated etanercept (50 mg/
Asymmetry and cavitation with compression are observed in the bone protrusions and skin layers are found to be disappeared. Somnolence, and pain. In physical examination, the clarity of basis of clinical criteria. Patients have complaints of swelling, reports, and there is no randomized study on it.

Remarkably improved with etanercept therapy, no response (9-11). As in our case, although lymphedema had previously port the relationship between inflammation and lymphedema of etanercept, cyclosporine, and adalimumab therapies, sup-

proves with decreased inflammation after the administration of lymphedema in a case with normal lymph flow. Similarly, Grillet et al. (21) found a prominent decrease in lymphedema with pulse methylpred-\n
nisolone therapy in their case. With regard to anti-TNF therapy, in the study of Lekpa et al. (10), they followed up a patient with PsA receiving etanercept therapy, and they observed a significant resolution in lymphedema. Similarly, Tong et al. reported a notable improvement in lymphedema of a patient with PsA receiving adalimumab therapy (11). In our patient, although an improve-

ment was observed in the clinical and laboratory parameters and complaints of the patient with the addition of etanercept therapy to leflunomide therapy, no apparent healing was observed in the swelling associated with lymphedema.

Conclusion

Lymphedema is a rarely observed complication in PsA. First of all, other factors that can cause the development of edema must be ruled out. Although there is not enough evidence regarding the treatment of lymphedema in patients with PsA, we believe that the suppression of inflammation can reduce lymphedema.

Informed Consent: Written informed consent was obtained patient who participated in this case.


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