15th Annual Congress of
Iranian Rheumatology Association

Methotrexate-induced skin lesion in a patient with rheumatoid arthritis

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Maryam Mobini 1, Sajede Naghibi 2.

1: Diabetes Research Center, Mazandaran University of Medical Sciences, Sari, Iran

2: Resident of Internal Medicine, Mazandaran university of medical sciences, Sari, Iran.

Correspondence author: Maryam Mobini. E mail: mmobini50@yahoo.com

Introduction: Methotrexate (MTX) rarely causes cutaneous ulceration and most cases are reported in patients with psoriasis and have been accompanied by pancytopenia[1]. It was reported that it may be happen without concurrent pancytopenia [2]. Herein, we present a rare case of MTX-induced mucocutaneous ulceration without concurrent pancytopenia in a patient with rheumatoid arthritis (RA).

Patient History: A 60-year-old woman known case of RA from 2 years ago, diabetes mellitus and hypertension, was referred with complaints of skin lesions of the limbs and mouth ulcers. She used methotrexate every other day, 2 times a day, without taking folic acid.

The patient also complained of nausea and vomiting and mouth ulcers that started two weeks ago following a sore throat who had received penicillin injection.

Examination showed an erythematous to purple plaque with a bull in its center in the dorsal and medial areas of the left foot and dorsum of the right hand (Figure 1,2).

Laboratory data included:

CBC: WBC: 3800, Hgb: 10, Plt: 130000, ESR: 55, Serum Cr:1.5 mg/dl,

RF: 32(20), Anti CCP: 2700(15).

The dermatologist diagnosed her with" fixed drug eruption", and "methotrexate toxicity", and for treatment, it was recommended to discontinue methotrexate and start fluocinolone ointment.

Treatment with hydration, folinic acid and prednisolone was started. Five days later, the results of lab data included:

CBC: WBC: 4700, Hgb: 9.5mg/dl, Plt: 167000, ESR: 17, Serum Cr:1 mg/dl.

Two weeks later, the patient's skin and mucosal lesions improved, and hydroxychloroquine and leflunomide were added to prednisolone to continue treatment.

Discussion:

The case demonstrated that MTX-induced mucocutaneous ulcerations can present in patients without bone marrow toxicity.

Tekur reported occurrence of multiple (two) cutaneous ulcers due to methotrexate in a nonpsoriatic patient without pancytopenia or other hematological abnormalities. The patient was on methotrexate for seronegative rheumatoid arthritis for 10 years. Stopping this medication led to complete healing of the ulcerated lesion in about four to six weeks[1].

Berna et al reported A 54-year-old man with a 2-month history of a blistering rash on the lower extremities, which had progressed to painful ulcers without concurrent pancytopenia. Medical history was notable for RA, for which the patient had been taking a stable dose of MTX 10 mg per week and folic acid 1 mg daily for 2 years[2].

Clinically, the absence of pancytopenia alone should not rule out MTX toxicity as a possible cause of cutaneous ulcerations.

Key word: Rheumatoid arthritis, methotrexate toxicity, skin lesion.

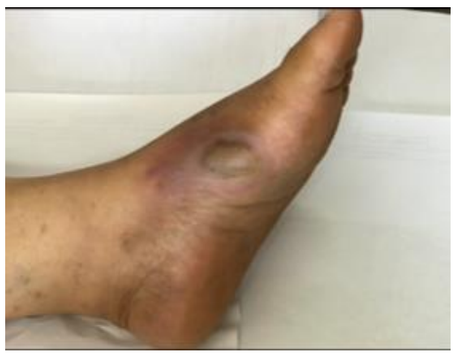

Figure 1: Erythematous plaque with bolus lesion in its center.

Figure 2: Ulcerated lesion with purple border.

References

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