

Mediterranean spotted fever as a non-endemic disease in the southeast of Iran: Diagnosis and treatment based on specific skin lesion (Tache Noire)

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Abstract

A 31-year-old man with fever, dyspnea, abdominal pain, and jaundice has been admitted to the hospital in the southeast of Iran. Due to the presence of a pathognomonic skin lesion (Tache noire), the patient was diagnosed with Mediterranean spotted fever (MSF) and was treated with doxycycline.

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ABSTRACT

A 31-year-old man with fever, dyspnea, abdominal pain, and jaundice has been admitted to the hospital in the southeast of Iran. Due to the presence of a pathognomonic skin lesion (Tache noire), the patient was diagnosed with Mediterranean spotted fever (MSF) and was treated with doxycycline.

Keywords: Mediterranean spotted fever, Tache noire, Iran

CASE PRESENTATION

A 31-year-old man began experiencing fever, dyspnea, malaise, nausea, and progressive abdominal pain from 10 days before admission when he traveled to Kerman, southeast of Iran. There was no history medication usage, or allergy.

In physical examination, the sclera was icteric. In the examination of the extremities, a dark crusty skin finding aligned with eschar, with a diameter of 1×1.5 cm could be observed in his right leg surrounded by scale, edema, and circular erythema (Figure 1). also, there were maculopapular rashes in all four extremities.

In laboratory tests, leukocytosis (white blood cell count: 24.3×10^9 /liter), abnormal aspartate aminotransferase (AST: 108 IU/L), alanine transaminase (ALT: 83 IU/L), and bilirubin (total: 12 mg/dL and direct: 8 mg/dL) were detected. Chest CT-scan showed bilateral pleural effusion, and thoracentesis was performed; the fluid was transudate.

According to the evidence of the pathognomonic skin lesion (Tache Noire) and the history of similar signs and symptoms in the patients who were treated in this center in the past,¹ after testing the sera samples for *Rickettsia* spp. by real-time PCR and IFA for the presence of antibodies against *R. conorii* ., the patient was treated with the diagnosis of Mediterranean Spotted Fever (MSF), with Doxycycline (100 mg/12 hours). The patient had good compliance with the antibiotic therapy, and he was discharged in less than one week with no complications. The diagnosis was confirmed by a positive PCR test and a fivefold rising of IgG antibodies against *R. conorii*. MSF is a tick-borne disease that is endemic in Mediterranean regions and is caused by *Rickettsia conorii* subspecies *conorii*. MSF findings include fever, maculopapular rash, and pathognomonic eschar.² Although Iran is considered a non-endemic country in terms of MSF, several cases of MSF have been reported in Kerman province in the southeast of Iran.^{1,3}



AUTHOR CONTRIBUTIONS

MF and SS were involved in patient clinical care. MN and MRZR were involve in literature review, initial manuscript writing, and revision of the manuscript.

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None.

CONFLICT OF INTEREST

The authors declare that there was conflict no of interest

CONSENT

Written informed consent was obtained from the patient to publish this report in accordance with the journal's patient consent policy

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