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### Case report

# Skinsarcoidosis: A trick for primary case physicians

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#### ABSTRACT

Sarcoidosis is a systemic disease of unknown etiology. Skin lesions occur in about a quarter of patients with sarcoidosis and specific manifestations include erythema nodosum, maculopapular eruption, plaques, lupus pernio and scar sarcoidosis. A 39-year old male presented with cutaneous involvement of sarcoidosis. The skin biopsy revealed non-caseating granuloma. Our patient had skin manifestation of makulopapular eruption form of skinsarcoidosis along with hilar and mediastinal lymphadenopathy. The 40 mg/day oral methylprednisolone was started and skin lesions were fully recovered. We report a case of skin involvement as a first sign of sarcoidosis.

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#### 1. Introduction

Sarcoidosis is a multisystem disease that may involve almost any organ system and characterized with non-caseating granuloma in histopathologic examination of affected organs. Approximately, %25 of sarcoidosis cases have cutaneous involvement, which may appear at any stage of the disease. We present a case with a skin lesions as the first sign of sarcoidosis.

#### 2. Case report

A 39-year old male presented with cough, weakness and eruption over the forehead and face of six weeks duration. Past history and family history were not significant. Blood analysis and pulmonary function tests were normal. Mantoux test was negative. Dermatological examination revealed the macular, papular and occasionally pustular lesions over the forehead and face (Fig. 1). Chest radiography and thorax CT showed the bilateral hilar and mediastinal multiple lymphadenopathies (Fig. 2). The punch biopsy from skin lesions performed and histopathologic examination confirmed the sarcoidosis with non-caseating granulomatous inflammation (Fig. 3).

### 3. Discussion

In Sarcoidosis of the skin, visible markings may not have a classic presentation. Skinsarcoidosis occurs in 25% of cases and

specific manifestations include erythema nodosum, maculopapular eruption, plaques, lupus pernio and scar sarcoidosis.<sup>2–4</sup> Without a patient history of Sarcoidosis and biopsy report, Sarcoidosis of the skin can be confused with other disorders. The biopsy should be performed from suspect tissue. The diagnosis is based on the consistent clinical, biological and radiological findings, supported by histological evidence of non-caseating epitheloid granuloma, as seen in our patient. Mana et al., reported that 30% of patients with isolated cutaneous lesions developed systemic involvement after a period of 1 month to 1 year.<sup>5</sup> Skinsarcoidosis is often associated with hilar, mediatinal lymphadenopathy and other systemic forms of Sarcoidosis. Our patient had skin manifestation of maculopapular eruption form of skinsarcoidosis along with hilar and mediastinal lymphadenopathy. There was no other systemic involvement of sarcoidosis. In the present case, skin lesions were the first sign of sarcoidosis.

Recognition of cutaneous lesions is important because they provide a visible clue to diagnosis and serve as an easily accessible source of tissue for histologic examination, as seen in our patient.<sup>6</sup>

Topical steroid therapy may be sometimes effective for purely cutaneous sarcoidosis. For disfiguring lesions unresponsive to initial topical therapy or in the case of systemic involvement, oral therapy with prednisolone, hydroxychloroquine, and methotrexate may be instituted.<sup>6–8</sup> The 40 mg/day oral methylprednisolone was given to the patient and skin lesions of patient were fully recovered.

In conclusion, the skin, although exceedingly rare, sarcoidosis may involve the skin and sarcoidosis can diagnose with biopsy from skin lesions.

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Fig. 1. The makuler, papuler and occasionally pistuler lesions are showing on the forehead and face.

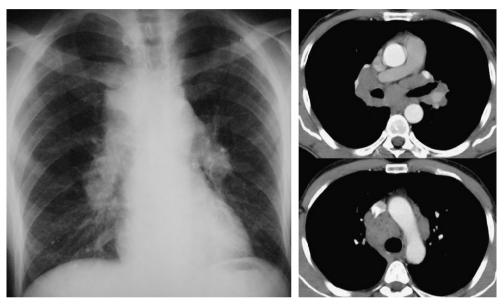


Fig. 2. Chest radiography and thorax CT are showing the bilateral hilar and mediastinal multiple lymphadenopathies.

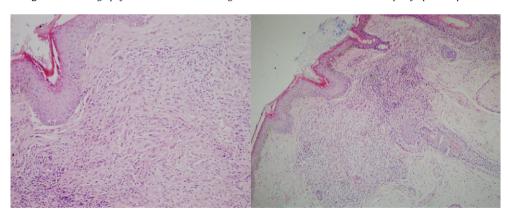


Fig. 3. Photomicrograph of the skin lesions showing (Hemotoxylin&EosinX200 and X100) the non-caseating granulomatous inflammation.

#### **Conflicts of interest**

The authors declare that they have no conflicts of interest.

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