CASE REPORT

Cutaneous Sarcoidosis

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Abstract

We present a case of exclusive cutaneous sarcoidosis with no clinical or radiological evidence of disease anywhere else in the body.Exclusive cutaneous involvement is rare and is reported in about 4.5%patients of sarcoidosis.

Key Words

Cutaneous, Sarcoidosis, Granulomas

Introduction

Sarcoidosis is a multisystemic disease of unknown cause, characterized by non caseating epithelioid granulomas in many tissues and organs (1).It involves mainly the lungs, mediastinum, peripheral lymph nodes, skin, liver, spleen, eyes and parotid glands. Cutaneous involvement is seen in 20%-35% of patients with Sarcoidosis (2).. Exclusive cutaneous involvement is rare and is reported in about 4%-5% of patients of sarcoidosis (3). Recognition of cutaneous lesions is important because they are easily accessible and provide a clue to the diagnosis.

Case Report

A 28 years old male presented in the outdoor patient department of Dermatology with papules over the face, nodule on the forehead and a plaque on the neck (*Fig.1 & 2*). On examination there were no palpable lymph nodes. His routine hematology, serum biochemistry and urine analysis were normal. He was advised Fine needle Aspiration cytology (FNAC) of the lesions and reported to pathology department for this. FNAC of the skin lesions revealed multiple granulomas (*Fig. 3*). No necrosis or giant cells were seen. Ziehl Neelsen (ZN) stain for acid fast bacilli was negative. The patient was advised to undergo biopsy.

Histopathology of the skin lesions showed variously sized aggregates of epithelioid cells scattered throughout the dermis with sparse surrounding lymphocytes (*Fig. 4*). No Langhans giant cells or caseous necrosis was seen. The case was reported as sarcoidosis of the skin and the patient was advised to undergo tuberculin skin test to rule out tuberculosis. Further patient was advised to undergo chest X-ray and ultrasound of abdomen to look for any systemic involvement. All these investigations came out to be negative. The patient was followed for a period of two years, and did not develop any systemic manifestations.

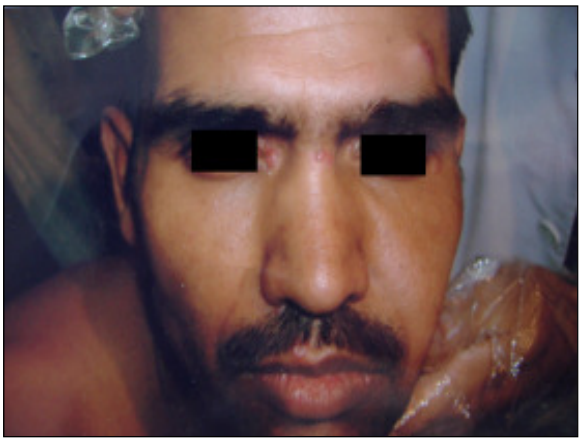

Fig. 1 Photograph of the Patient Showing Papules Over the Face and a Nodule Over the Forehead

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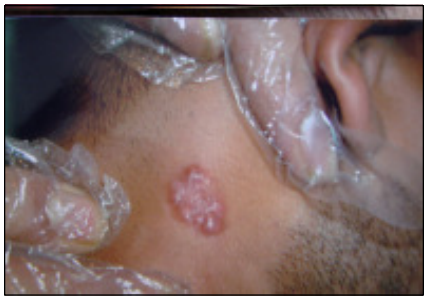

Fig 2. Photograph of the Patient Showing Plaque on the Neck

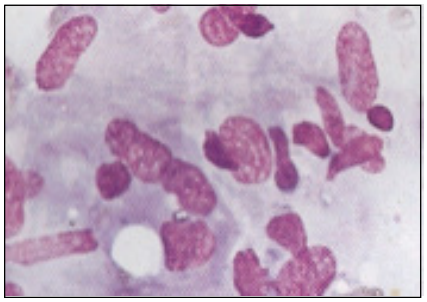

Fig 3. Photomicrograph of Cytology of the Skin Lesion Showing an Epithelioid Granuloma

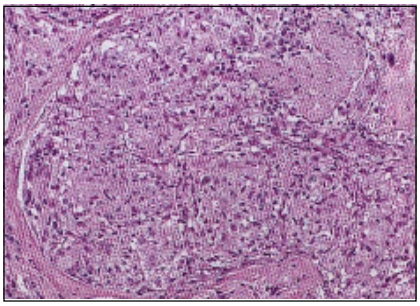

Fig 4. Photomicrograph of the Histopathology of the Skin Lesion Showing Many Epithelioid Cell Granulomas

Discussion

The cutaneous lesions of sarcoidosis assume a vast array of morphologies; therefore cutaneous sarcoidsis is considered one of the great mimickers in dermatology practice (4). Cutaneous lesions are classified as specific and non specific. The most common specific skin lesions are papules. They mostly occur on the face, but may occur anywhere in the body. Plaques are large flat top lesions that are located on the face, trunk or extremities. Plaques may be single or multiple. Lupus pernio is one of the characteristic manifestations of sarcoidosis. Lesions are chronic, indurated papules or plaques that affect the nose, cheeks and ears. Cutaneous sarcoidosis can also appear in preexisting scars, known as scar sarcoidosis. The most common nonspecific skin lesion is erythema nodosum (5).The association of erythema nodosum with hilar lymphadenopathy is known as Lofgren syndrome.

Cutaneous involvement in sarcoidosis may occur at any stage of the disease, but often it is the first presentation. In such cases, patient presents to the dermatologist (6). Skin biopsy is useful and readily accessible procedure. Delayed diagnosis of sarcoidosis is seen in our part of the world, where tuberculosis remains the first diagnostic possibility. In many cases, it is difficult to differentiate between sarcoidosis and tuberculosis of the skin on histopathology. The infiltrate of sarcoidois lies scattered throughout the dermis, whereas the infiltrate in lupus vulgaris is located close to the epidermis. Sarcoidosis shows only few lymphoid cells at the periphery of the granulomas, giving the appearance of naked epithelioid cell tubercles, whereas lupus vulgaris shows a marked lymphocytic infiltrate around and between the granulomas (7).The granulomas of sarcoidosis show minimal central necrosis as compared to granulomas of lupus vulgaris.

Conclusion

Work up for systemic sarcoidosis should be undertaken in all patients who have sarcoid granulomas of the skin. It should include general history and physical examination, chest radiography, tuberculin skin test, and routine laboratory investigations. If systemic sarcoidosis cannot be demonstrated, a long term follow up should be undertaken. In many cases there is no clinical or radiological evidence elsewhere in the body, despite follow up.

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