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# A RARE CASE REPORT OF CUTANEOUS SARCOIDOSIS

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**ABSTRACT** Sarcoidosis is a multisystem granulomatous disease of unknown aetiology. It involves mainly the lungs, mediastinum, peripheral lymph nodes, skin, liver, spleen, eyes and parotid glands. Cutaneous sarcoidosis is seen in up to one-third of patients and may be the first or the only clinical sign of the disease. Here, We report a case of cutaneous sarcoidosis with lymphadenopathy.

**KEYWORDS :** Sarcoidosis, cutaneous, granulomatous, lymphadenopathy

## INTRODUCTION

Sarcoidosis is a multisystem granulomatous disorder with an unknown cause. It primarily affects the lungs, mediastinum, lymph nodes, skin, liver, spleen, eyes, and parotid glands. Cutaneous sarcoidosis affects up to one-third of patients and could be the initial or only clinical manifestation of the disorder. Cutaneous sarcoidosis presents as a diagnostic challenge due to its diverse presentations and almost similar histologic pictures. As a result, the exclusion of infectious etiology and integration with the clinical and radiologic image serve as important criteria for making a diagnosis. Skin lesions must be identified because they provide an accessible source of tissue for histopathological evaluation.

## CASE REPORT

We report a case of cutaneous sarcoidosis with lymphadenopathy in a 47 year old housewife. She presented with history of insidious onset of gradually progressive asymptomatic, erythematous papules of 2–5 mm size, over both upper limbs and upper back for 1 year. Histopathological examination of skin lesion revealed well circumscribed noncaseating epithelioid granulomas with relatively very thin mantle of lymphocytes, packed throughout the upper dermis. Fite faraco staining does not reveal any AFB. CT Chest showed multiple enlarged pretracheal, bilateral paratracheal and bilateral hilar lymph nodes with no abnormality in pulmonary parenchyma. Serum angiotensin converting enzyme levels were raised and Montoux test was negative.

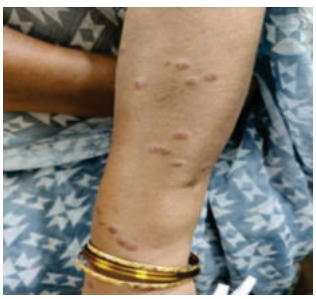

**Fig. 1 : Photograph of the patient showing papules over the forearm**

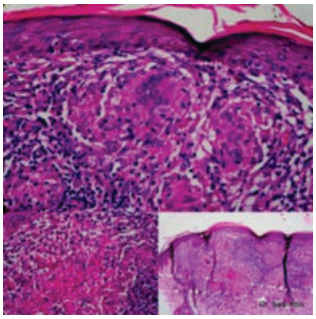

**Fig 2. Photomicrograph of the histopathology of the skin lesion showing confluent epithelioid Cell granulomas with a very thin mantle of lymphocytes around it.**

## DISCUSSION

Several sources of evidence point to this disease being caused by dysregulated immune regulation in genetically susceptible individuals. Because cutaneous sarcoidosis can take on a wide variety of morphologies, it is regarded as one of the great mimickers in dermatology. (1) Skin lesions are divided into two types: specific and nonspecific. Papules, plaques, lupus pernio, subcutaneous nodules are the specific skin lesions. They are most common on the face, but they can occur any area of the body. Scar sarcoidosis occurs when cutaneous sarcoidosis appears in preceding scars. Erythema nodosum is the most prevalent nonspecific cutaneous lesion. (2) Lofgren syndrome is the combination of erythema nodosum and hilar lymphadenopathy.

Skin manifestations in systemic sarcoidosis can take place during any phase of the disease, but it is most common at the beginning and can be the only presentation. (3) This is especially true in this case. In these cases, the individual visits a dermatologist. Skin biopsy is a simple and convenient procedure. In India, where tuberculosis is still the most common diagnosis, sarcoidosis is often diagnosed late. On histopathological examination, it is often hard to distinguish between sarcoidosis and tuberculosis of the skin. Sarcoidosis infiltrates are dispersed all across the dermis, whilst lupus vulgaris infiltrates are concentrated near the epidermis. Sarcoidosis has little lymphoid cells on the granulomas' periphery, resulting in the impression of naked epithelioid cell tubercles, whilst lupus vulgaris has a significant lymphocytic infiltrate around and among the granulomas. (4) Sarcoidosis granulomas exhibit less central necrosis than lupus vulgaris granulomas.

The following criteria are used to diagnose cutaneous sarcoidosis: 1. A clinically and radiologically consistent picture 2. Non-caseating granulomas in histopathology 3. Exclusion of granulomatous diseases caused by mycobacterial, fungal, or parasitic infections. In addition, a nonspecific local "sarcoid reaction" with noncaseating granulomas but no evidence of systemic disease should not be overlooked. In sarcoidosis, serum ACE levels have been utilized as a significant test. ACE levels are produced from the epitheloid cells of granulomas and represent the patient's granuloma burden. It is raised in 60% of cases, as in this case, and is use to monitor course of disease.

There are four major types of skin disorders that simulate sarcoidosis: 1. Infections 2. Allergic and immunological disorders 3. Granulomatous diseases 4. Lymphoma and pseudolymphoma.

Sarcoidosis takes an unforeseen path. 65 to 70% of individuals recover with limited or no permanent damage, 20% have residual loss of certain lung function or impaired vision, and the rest 10 to 15% die from heart and nervous injury or lung fibrosis.

## CONCLUSION

Since skin manifestations of sarcoidosis are so variable, early recognition is critical for earlier detection and prevention of systemic complications. A thorough history and physical examination, chest imaging, mantoux test, ACE levels, and basic laboratory tests should

all be performed to rule out systemic sarcoidosis. If systemic sarcoidosis cannot be established, a long-term follow-up should be performed.

**CONFLICT OF INTEREST:** Nil

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