

# Cutaneous Sarcoidosis Case Report

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## Abstract

Sarcoidosis is an inflammatory disease that affects multiple organs in the body, but mostly the lungs and lymph glands. In people with sarcoidosis, abnormal masses or nodules (called granulomas) consisting of inflamed tissues form in certain organs of the body. These granulomas may alter the normal structure and possibly the function of the affected organ(s).

**Objective :** to identify systemic and cutaneous disease in human body with bone marrow proliferation.

**Patients and Methods :** 54 years old man patient complained of fever and night sweats. He was missed diagnosed in Cairo by oncologist as diffuse large B cell lymphoma patient since 2007 due to involvement liver and lymph nodes and he received treatment with Gemzar drug and he complete remission from liver damage . At 2015 complained of night sweats;, fever and loss of weight and high cough and reumatic pain miss diagnosed as tuberculosis T B in Jordan and he received treatment for one year without improvement. I received the patient in 2018 started appeared erythematous papulo nodular skin eruptions in his body I revised all his previous investigations . CBC , Bone marrow biopsy and aspiration, liver biopsy, hilar lymph node biopsy skin biopsy , immunohistochemical cytology ziel Nelson stain-ve ,PCR-VE, tuberclin test -ve ACE angiotensin converting enzyme and liver function test were diagnostic plain chest xr-ay, ultrasound for liver .

**Results :** The clinical data and investigations showed the patient had non caseating necrosis inflammatory granuloma in his thoracic lymph nodes and liver and skin most probably systemic and cutaneous sarcoidosis.

**Conclusion :** sarcoidosis is unknown etiology disease and treated with methotrexate and prednisolone orally with monitoring follow up..

**Key words:** Yemeni ; male ; patient ; sarcoidosis ; cutaneous

## Introduction:

Case study 50 years old Yemeni man patient presented ill. He has fever night sweating , weight loss ,high cough and arthralgia. Plan x ray showed hilar lymphadenopathy. Abdominal ultrasonography showed hepatosplenomegaly. Bone marrow aspiration showed active proliferation and Zelnelson staining negative. Tuberculin test is negative. Skin eruptions showed fleshy papules and nodules and plaques and annular lesions in the upper back and lower limbs. ( figures

1,2,3). Skin biopsy showed hallmark noncaseating granuloma.( figure 4) The patient under treatment of methotrexate and prednisolone oral drugs. His case is stable. Comment

Dermatologic manifestations are seen in 25% of patients with sarcoidosis. They usually accompany systemic involvement, but in some cases they may be the only manifestations of the disease. Sarcoidosis is characterized by noncaseating

epithelioid granulomas that may affect any organ system. Although Jonathan Hutchinson described the first case in 1869, the etiology of the disease is still unknown. The disease most commonly involves granuloma formation in the lungs, with 90-95% of patients having some pulmonary involvement. Other commonly involved organ systems include the lymph nodes (especially the intrathoracic nodes), the skin, the eyes, the liver, the heart, and the nervous, musculoskeletal, renal, and endocrine systems. Erythema nodosum. Erythema nodosum is a hypersensitivity reaction resulting from exposure to a variety of infectious agents (especially recent streptococcal infection), drugs (including oral contraceptives), or systemic inflammatory disorders (eg, sarcoidosis, inflammatory bowel disease). EN is usually an acute, self-limiting process and rarely requires treatment. Recurrences are uncommon. Tender, erythematous nodules are usually present on the extremities, most commonly on the anterior surface of the tibia. Fever, arthralgia, and malaise may occur. EN is more common in European, especially Scandinavian, women of childbearing age than in other people. Löfgren syndrome is classically described as a triad of EN, polyarthritis, and hilar adenopathy. The adenopathy may be unilateral or bilateral hilar and/or right paratracheal lymphadenopathy. Other symptoms include anterior uveitis, fever, ankle periarthritis, arthralgias, and pulmonary involvement. Löfgren syndrome is usually an acute disease with an excellent prognosis, typically resolving spontaneously from 6-8 weeks to up to 2 years after onset. Pulmonologists, ophthalmologists, and rheumatologists often define this syndrome differently, describing varying combinations of arthritis, arthralgia, uveitis, EN, hilar adenopathy, and/or other clinical findings. Lupus pernio, first described by Besnier in 1889, is a striking manifestation of sarcoidal skin lesions. Lupus pernio is characterized by red to purple or violaceous, indurated plaques and nodules that usually affect the nose, cheeks, ears, and lips, but it can appear on the dorsa of the hands, and on the fingers, toes, and forehead. Lupus pernio is usually more common in black women with long-standing systemic, usually pulmonary, sarcoidosis than in other people. It is also commonly seen with chronic uveitis and bone cysts. The course is usually chronic, may be more recalcitrant to treatment, and may result in severe cosmetic disfigurement. Lupus pernio, especially involving the nasal rim, has been associated with granulomatous involvement of

the upper respiratory tract (50%) and lungs (75%). Additionally, it is associated with a higher frequency of ocular involvement, bone cyst formation, and lymphadenopathy or organomegaly. Macular or papular sarcoidosis is the most common lesion seen in cutaneous sarcoidosis, especially in black women. Granulomatous acne rosacea may mimic sarcoidosis clinically and histopathologically. Usually, lesions are asymptomatic, red-brown macules and papules commonly involving the face, the periorbital areas, the nasolabial folds, and/or the extensor surfaces. Lesions usually resolve without scarring, although scarring may occur. These lesions may also occur in acute sarcoidosis. Periocular papules and plaques. The use of dermoscopy to aid in the clinical diagnosis of macular and plaque-type sarcoidosis has been reported, with findings of "translucent yellow to orange globular-like or structureless areas associated with linear vessels" and being associated with granulomatous skin disease, including cutaneous sarcoid. Widespread atrophic lesions with elastolysis have been reported, and widespread lichenoid lesions may resemble erythroderma. Plaque sarcoidosis is characterized by round to oval, red-brown to purple, infiltrated plaques; the center of the plaque may be atrophic. Some plaques may even appear scaly and can be confused with lesions of psoriasis or lichen planus. Dermoscopy may aid in the clinical diagnosis, as noted above. The lesions most commonly occur on the extremities, face, scalp, back, and buttocks, and they may have an annular appearance. The distribution is usually symmetrical. Angiolupoid sarcoidosis is a subtype that has a similar appearance but has large, telangiectatic vessels in addition to the characteristics mentioned above. This form of cutaneous involvement is usually chronic; most patients have the disease for more than 2 years. Lesions can heal with scarring, and, if plaques involve the scalp, they may lead to alopecia. Patients with plaque lesions usually have more severe systemic involvement. Subcutaneous nodular sarcoidosis. Subcutaneous nodular sarcoidosis is also called Darier-Roussy sarcoidosis. Lesions are usually nontender, firm, oval, flesh-colored or violaceous nodules that are 0.5-2 cm in diameter. They are commonly found on the extremities or trunk. These lesions usually appear in the beginning of the disease. Patients with these lesions often have nonsevere systemic disease. In some patients, the nodules resolve spontaneously.



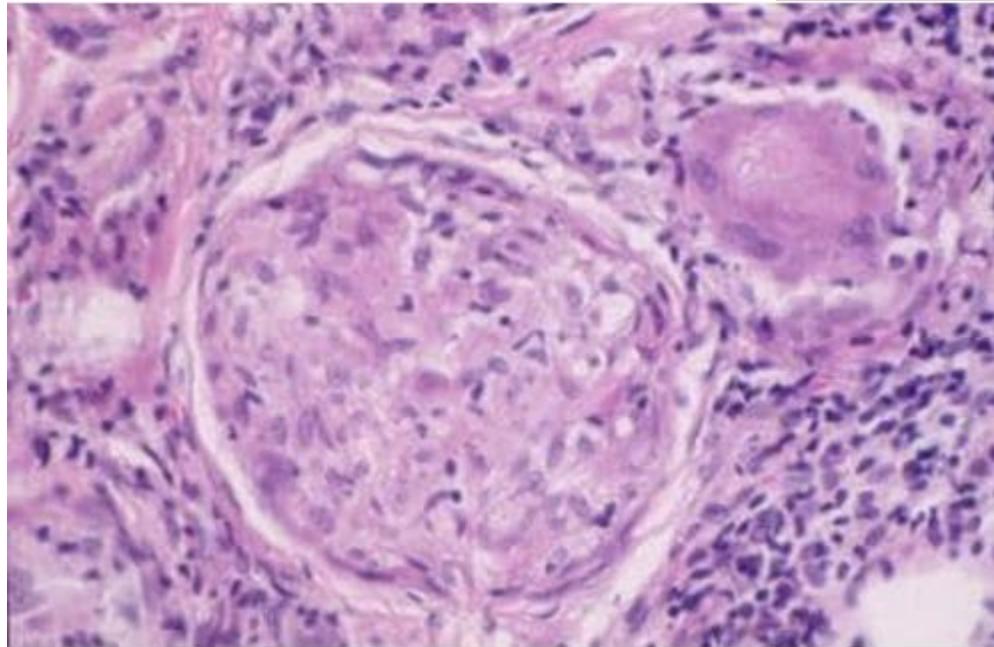
Figure 1: erythematous fleshy plaques, macules, papules in the upper chest



Figure 2: lupus pernio papules and annular



Figure 3 : lupus pernio and plaques and annular lesions



**Figure 4 : Histopathologic features of sarcoidosis showing the hallmark noncaseating granuloma.**

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