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# SUBCUTANEOUS SARCOIDOSIS

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We report a rare case of subcutaneous sarcoidosis without systemic involvement in a 38-year-old male. The lesions subsided dramatically after the patient was put on 100 mg/ day of dapsone for two months.

**Key Words : Subcutaneous sarcoidosis, Dapsone**

## Introduction

Sarcoidosis is a disease characterized by the formation of non-caseating epithelioid cell granulomas in all of several affected organs or tissues. The course is protracted and usually benign with disabling sequelae sometimes. About 20 to 30% of patients with systemic sarcoidosis have skin lesions, but cutaneous sarcoidosis can also occur without systemic disease.

Cutaneous sarcoidosis presents in different morphological forms. These lesions are due to dense accumulations of epithelioid cell granulomas in the dermis with extension to the subcutaneous tissue in the deep nodular and infiltrative types. The colour ranges from yellow ochre to a violaceous hue. Scarring is unusual except in the papular and annular forms.

## Case Report

A 38-year-old male presented with asymptomatic nodules over the upper and lower limbs and trunk of about eight months duration. These lesions started as skin coloured nodules over the flexor aspect of both forearms, and gradually increased in size and number to involve the thighs and trunk also. Colour varied from coppery red to a purplish hue. The nodules were non-tender and firm in consistency.

Systemic examination revealed no abnormality. Routine investigations of blood and urine were done and revealed no abnormality. Ultrasound examination of the adbomen and X-ray chest were normal. The serum VDRL was non-reactive. Histopathological examination of a nodule revealed solid epithelioid cell tubercles containing Langhan's giant cells in the deeper dermis with no caseation. Epidermis was within normal limits.

The patient was put on 100 mg/day of dapsone. The lesions started decreasing in size, with no occurrence of fresh lesions. After about two months the nodules completely disappeared to leave areas of hyperpigmentation.

## Discussion

Subcutaneous sarcoidosis is a rare manifestation of sarcoidosis. Darier and Roussy reported the first case in 1904. Vainscher and Winkelmann in 1984 reported 4 cases of subcutaneous sarcoidosis,[2] three of which showed systemic involvement. Complete search of world literature revealed only 13 cases of subcutaneous sarcoidosis, with evidence of systemic involvement in most of the cases.[2] Review of Indian literature failed to reveal any case report of subcutaneous sarcoidosis without systemic involvement.

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Our patient presented in the fourth decade with painless nodules, most of them on the extremities and some on the trunk. Histopathology revealed the typical naked tubercles in the subcutaneous tissue. These correlate with the features described by Vainsencher and Winkelmann.[2]

Immunomodulatory drugs like chloroquine,[3] levamisole[4] and corticosteroids[5] have been used with varying success in cases of sarcoidosis. We used dapsone in our patient because of its immunomodulatory effect. There was total subsidence of lesions in two months which is much earlier than spontaneous regression seen in earlier reported cases, which occurred in 6-12 months.[2] This led us to believe that the use of dapsone hastened the resolution.

We present this case because of the rarity of the occurrence of subcutaneous sarcoidosis without systemic involvement and its response to dapsone therapy.

## References

1. Darier J, Roussy G. Ann Dermatol Syphilol 1904; 5: 144-9.
2. Vainsencher D, Winkelmann RK. Subcutaneous sarcoidosis. Arch Dermatol 1984; 120: 1028-31.
3. Barre PE, Gascon-Barre M, Meakins JL, et al. Hydroxycholoroquine treatment of hypercalcemia in a patient with sarcoidosis undergoing hemodialysis. Am J Med 1987; 82: 1259-62.
4. Vein NK. Cutaneous sarcoidosis treated with levamisole. Dermatologica 1977; 4: 75-87.
5. Israel HL. The treatment of sarcoidosis. Postgrad Med J 1970; 46: 537-40.