Sarcoidal reaction of the skin in syphilis

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Syphilis was designated as 'the great imitator' by Sir William Osler. Reports of syphilis manifesting as sarcoidosis are very rare (Frazier and Hu, 1933; Bernstein and Leider, 1950).

Case report

A 60-year-old unmarried nomadic monk attended as an out-patient on April 11, 1969, with erythematous papulo-squamous lesions on the buttocks and extremities. The lesions had appeared insidiously over the past 18 years. They were asymptomatic, had never ulcerated or exuded, and were more or less persistent. He had taken some indigenous remedies from time to time but without relief.

He gave a history of having developed a penile sore about 20 years previously after exposure with a woman. He had taken some 'powders' and the sore had healed. Soon after this he had developed joint pains for which he again had indigenous treatment; the pains were relieved after about 2 years, but he then started developing the skin lesions. There was no history of similar disease in his family.

EXAMINATION

The erythematous papulo-squamous lesions, some with polycyclic and annular configurations, were distributed symmetrically on the buttocks, arms, and legs, and involved both extensor and flexural areas. The lesions felt infiltrated. Grattage was negative. There was no scarring, no other skin or mucous membrane lesion, and no lymphadenopathy. Sensory reactions were normal and there was no thickening of the peripheral nerves. Other systems were clinically normal.

![FIG. 1 Atrophic epidermis and islands of granulomatous inflammation in the superficial and mid-dermis. Haematoxylin and eosin. X 150](http://stj.bmj.com/)

![FIG. 2 Islands of granulomatous inflammation around the skin appendages. Haematoxylin and eosin. X 150](http://stj.bmj.com/)
Laboratory investigations
The VDRL test was positive at a titre of 1:128 Hb 9.5 g. per cent. Total leucocyte count 6,000/cmm. (polymorphs 64 per cent., lymphocytes 33 per cent., eosinophils 2 per cent.)
Total serum protein 7 g. per cent., (albumin 3.8 per cent., globulin 3.2 per cent.).
X rays of the chest and fluoroscopic examination of the heart and aorta revealed no abnormalities.
Cerebrospinal fluid examination was refused by the patient.

Skin biopsy
The epidermis overlying the lesion was atrophic. The dermis showed islands of granulomatous inflammation distributed throughout, but mostly in the superficial and mid-dermis and around the pilo-sebaceous follicles, sweat glands, and ducts, practically destroying the arrectores pilorum. The granulomata were fairly well defined and circumscribed and consisted mostly of lymphocytes, histiocytes, epithelioid cells, and some giant cells (Figs 1, 2, 3 and 4). There were no plasma cells and no vascular pathology.

TREATMENT
Daily intramuscular injections of PAM 600,000 units were given for 10 days. The body temperature rose slightly after the first injection.

RESULT
By the tenth injection (May 19, 1969) most of the lesions had regressed. On June 6, 1959, all the lesions had completely resolved leaving slatey pigmentation with no scarring. In spite of our best efforts, the patient would not agree to any further investigations and he has not been seen since.

Comment
The histopathology of this case was suggestive of tuberculoid leprosy, but there was no supporting clinical evidence. There was no histological evidence of syphilis; there were no plasma cells and vascular endothelial proliferation was lacking. The histopathology was consistent with sarcoidosis, although the lesions were not as sharply punched-out and the epithelioid reaction was not as prominent as is usual in this condition.

The aetiology of sarcoidosis is still unknown, and the concept of sarcoidosis as a valid clinico-pathological entity may still be debated.

However, there is increasing agreement that sarcoidosis should be distinguished from 'sarcoidal reactions' induced by, for example, beryllium, tuberculosis, and numerous other physical and infective agents.

FIG. 3 Higher magnification of part of Fig. 2. × 450

FIG. 4 Reticulin fibres surrounding and permeating the granulomatous islands. Foot's reticulin stain. × 150
In the case presented above it would appear that *Treponema pallidum* was responsible for provoking the sarcoidal reaction.

**Summary**

A case is reported of acquired syphilis with skin lesions having the clinical and histopathological features of sarcoidosis. There was rapid cure with penicillin treatment.

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**References**


**Sommaire**

On rapporte un cas de syphilis acquise avec des lésions présentant, tant du point de vue clinique qu’histopathologique, le type du sarcoïde. La guérison fut obtenue rapidement par la pénicilline.