Horny syphilide

C. N. SOWMINI AND C. CHELLAMUTHIAH

From the Institute of Venereology, Government General Hospital and Madras Medical College, Madras-3, India

The index of suspicion of syphilis being low at present, the omission of a routine serological test for syphilis (STS) has sometimes led to the diagnosis being missed, even when syphilis presents in a classical form. In such circumstances it is not surprising for an unusual manifestation of syphilis to be completely overlooked.

In the case reported below, cutaneous syphilis clinically resembled a viral wart, cornu cutaneum, tuberculosis verrucosa cutis, or secondary yaws. If a routine STS had not been performed and if the physician's threshold of suspicion of syphilis had been low, the cause of this condition could have been missed.

Case report

An unmarried male clerk from Madurai, aged 26 years, came to the Institute of Venereology, Madras, on May 16, 1970, because of multiple warty outgrowths over the dorsum of the right foot. He stated that the condition had started 2 years earlier as a small wart on the lateral aspect of the right big toe: this wart had grown and given rise to another 'kissing' wart. He went to the local hospital and was prescribed 20 per cent. podophyllin in tincture of Benzoin, which he applied regularly for 2 months. The condition did not improve and more warts developed. He then consulted a surgeon who refused to excise the lesions, and so he tried shaving the warts, as a result of which they bled profusely. A few days later he applied concentrated nitric acid to two warts, which produced ulceration. This healed within a few days, leaving behind even bigger warts. He then attended the Department of Dermatology, Governmental General Hospital, Madras, was found to have positive serological tests for syphilis, and was referred to the Institute of Venereology.

PREVIOUS HISTORY

The patient revealed that he had developed a genital sore after intercourse with a prostitute 1 year before the appearance of the lesions on the foot. The sore had healed following the application of penicillin ointment.

EXAMINATION

Apart from the foot lesions, the patient was healthy with no abnormality in the cardiovascular, alimentary,

respiratory, or central nervous systems. Genital examination revealed a faint scar on the coronal sulcus at 9 o'clock. The inguinal lymph nodes were enlarged, discrete, and non-tender; other lymph nodes were not enlarged. There were eight painless, non-indurated, warty excrescences over the dorsum of the right foot around the base of the great and second toes. Two bigger warts were pigmented peripherally (Fig. 1). None of these lesions was indurated. There was no other abnormality of the skin and the mucous membranes, joints, and bones were normal.

FIG. 1 *Horn-like lesions on dorsum of right foot before treatment*

Investigations

Venereal Disease Research Laboratory slide test—reactive at a titre of 1 in 16.

Absorbed fluorescent treponemal antibody test—reactive.

Cerebrospinal fluid—normal.

Darkfield microscopy of a scraping from the warty lesion showed no treponemes; material stained by Gram's, Leishman's, and Ziehl-Neelsen's methods did not show acid-fast bacilli or any other common pathogen.

Mantoux test—positive (8 mm. diameter with palpable induration).

X-rays of the lungs, heart, and aorta—normal.

A biopsy of one of the lesions revealed typical changes of syphilis. The epidermis showed hyperkeratosis, with parakeratosis, thickened stratum granulosum, and irregular acanthosis of the prickly layer. In the superficial dermis foci of cells were seen chiefly around the blood vessels. The cells were mainly lymphocytes, plasma cells, and occasionally epithelioid cells. In the dermis the vessels showed endothelial proliferation with perivascular cuffing (Figs 2, 3, 4).

FIG. 2 *Hyperkeratosis, focal cell collection around blood vessels in papillae of dermis, and small perivascular granuloma in the mid-dermis. Haematoxylin and eosin. $\times 320$*

TREATMENT

The patient was started on antisyphilitic treatment, consisting of procaine penicillin with 2 per cent. aluminium

FIG. 3 *Extreme degree of hyperkeratosis and perivascular collection of cells in dermis. Haematoxylin and eosin. $\times 320$*

FIG. 4 *Granuloma of mid-dermis in a lesion shown in Fig. 1. There is marked endothelial proliferation and perivascular cuffing by cells: lymphocytes, histiocytes, and plasma cells. Haematoxylin and eosin. $\times 160$*

monostearate 600,000 u. daily by intramuscular injection for 10 days, and Bisoxyl 2 ml. by intramuscular injection weekly for 8 weeks. No local treatment was given.

RESULT

By the end of this course of treatment the lesions had flattened out completely and the patient was discharged from the hospital.

FOLLOW-UP

3 months later he was re-examined clinically and serologically. There were faint scars at the sites of the lesions (Fig. 5) and the serum VDRL slide test was reactive at a titre of 1 in 8.

FIG. 5 Right foot after treatment

Comment

The warty lesions seen on the dorsum of the right foot in this case fit in with the clinical entity known as *syphilide cornée*, a condition first described by French

authors and later by Hazen (1928) who grouped it under squamous syphilides; Stokes, Beerman, and Ingraham (1944) called it late syphilis of the palms; Saunders and Hougstrom (1950) considered it to be a late sign of early syphilis; Sutton (1956) regarded it as due to secondary syphilis. The lesions may occur on the palm of the hand or sole of the foot. Papular lesions between the digits developing maceration and condylomatous change have also been described. But dry, warty lesions resembling warts on skin surfaces other than palms and soles have not been described. In yaws the lesions are exuberant but they are either crusted or papillomatous and not warty, as in this case.

The clinical features of this case were not characteristic of syphilis; they suggested viral warts, cornu cutaneum, or tuberculosis verrucosa cutis. However, the history of recent syphilitic infection, the strongly reactive serological tests for syphilis, unmistakable syphilitic histological changes, and the response to the antisyphilitic treatment all favour the diagnosis of syphilis.

Summary

A case of an unusual manifestation of cutaneous syphilis as a horny syphilide is presented. This case illustrates the need for a high index of suspicion of syphilis in areas where treponemal infection is endemic and the usefulness of routine serological tests for syphilis.

The authors wish to thank the Dean, Government General Hospital and Madras Medical College, for permission to use the hospital records in the preparation of this article.

References

- HAZEN, H. H. (1928) 'Syphilis', 2nd ed., p. 149. Mosby, St. Louis.
- SAUNDERS, T. S., and HOUNGSTROM, G. (1950) *Amer. J. Syph.*, **34**, 361
- STOKES, J. H., BEERMAN, H., and INGRAHAM, N. R., Jr. (1944) 'Modern Clinical Syphilology', 3rd ed., p. 748. Saunders, Philadelphia
- SUTTON, R. L. (1956) 'Diseases of the Skin', 11th ed., p. 397. Mosby, St. Louis

Une syphilide cornée

SOMMAIRE

On présente une manifestation inhabituelle de syphilis cutanée sous forme d'une syphilide cornée. Ce cas illustre la nécessité de suspecter fortement la syphilis dans les zones où l'infection tréponémique est endémique et l'utilité du dépistage sérologique de routine pour la syphilis.