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ORIGINAL ARTICLES

Yaws in Trivndraum

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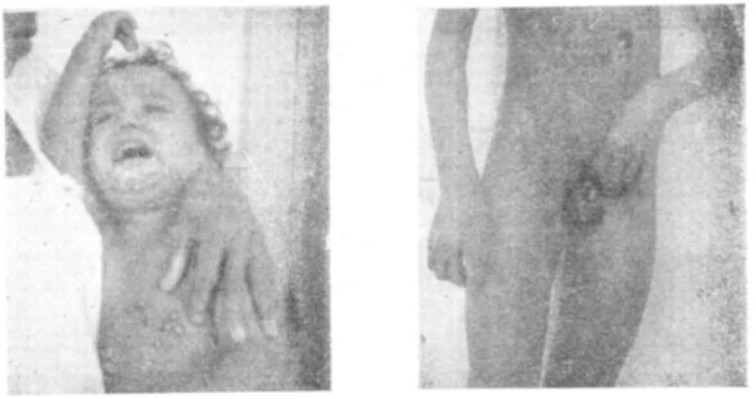
YAWS is an infectious disease characterised by an initial cutaneous papular lesion followed by multiple papular granulamatous eruptions upon the skins and bones. It is essentially a disease of the under-privileged areas where poverty and overcrowding help to keep the infection endemic. The earliest cases of Yaws reported in India were from Assam and Travancore. Endemic foci are known to exist also in some parts of North-east India, Andhra-Pradesh, Madhya Pradesh, Orissa, Hyderabad and some districts of Madras.



Some typical cases of Yaws.

According to the unitary concept of Treponematosis (Hudson) the non-venereal infection Yaws and venereal Syphilis are at the two

ends of biological scale with numerous transitional types in-between, variously termed: Bejal, Pinta, Irkintja, Njivera, etc. It is possible that, to a large exent at least, the subtle differences in the clinical manifestations of these types are due to environmental factors. In the slums it is not unusual for syphilis to be transmitted by non-venereal contact resulting in he so-called "endemic syphilis (Gwin, Rajam). Clinically, these resembles Yaws. Because of the mode of transmission, cases of yaws and endemic syphilis tend to occur in families. This paper presents an account of two families, whose members attended the Dermatology and Venereology clinic of the Trivandrum Medical College for treatment for Yaws.

CASE REPORTS

Family I

On 8-5-1957, Appu, a two-year old boy and his brother Yesudasan, 13 years old, attended the clinic. The former had a large indurated, crusted, raised ulcer, one inch in diameter on the middle of the right leg with small papules surrounding it and showing signs of healing; hypertrophic, eroded and uneroded papular lesions of different sizes over the trunk and both extremities, a condylomatous lesion on the peno-scrotal fold and crusted, confluent framboesiform lesions over the circumoral region. There was no marked glandular enlargement. Mucous membranes were not affected. Both from history and clinical appearance, the ulcer on the right leg was the earliest lesion and was of one month's duration. Treponemes were seen by dark microscopic examination of material from the lesions on the right leg and trunk. Wasserman and Kahn tests were strong positive.

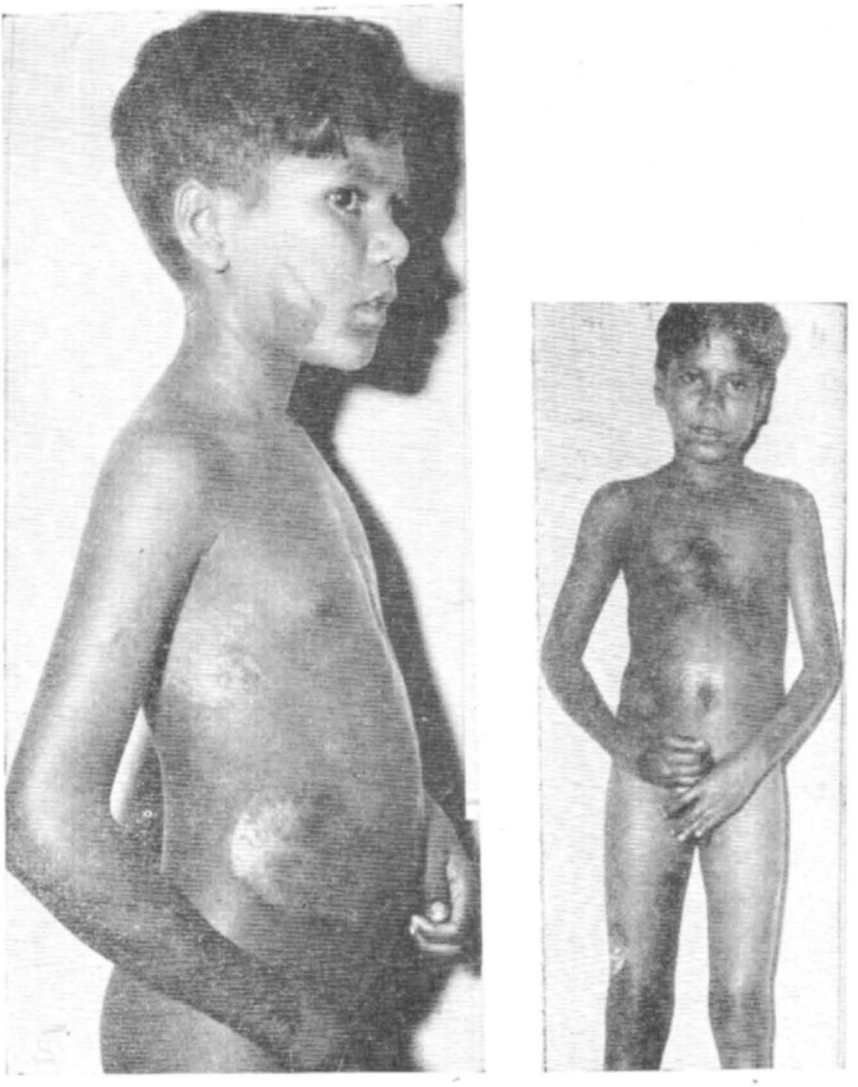
Yasudasan, the elder brother had large, framboesiform lesions over the forehead, neck and left axilla, a few papulopustular lesions on the upper limbs and eroded papules on the peno-scrotal and scroto-perenial regions. Eiptrochlear and posterior cervical lymph glands were enlarged. Mucous membranes were not involved. The lesions were of 13 days' duration. The patient could not say which lesion appeared first. Dark ground microscopy was positive from all the lesions. Wasserman and Kahn Tests were strong positive.

The other members of the family — parents and three other children — were examined for evidence of treponemal infection and were found negative clinically and serologically.

Twelve weeks later, on 31-7-1957, the mother Maria, aged 37 reported with two hypertrophic, hemispherical, crusted papules on the left upper arm and a few satelite papules around them. The lesions were one week old. There were no lesions anywhere on the body, including the genitalia and mucous membranes. The lesions were positive by dark ground microscopy . Wasserman and Kahn Tests were strong positive. Her husband did not show any evidence of infection.

Eight weeks later, on 25-9-1957, the father, Yacko, aged 45 years, reported for treatment. He had crusted slightly irregular, Hypertro-

phic papule 1½″ × 2″ in size above the umbilicus, scattered papular and papulopustular lesions on the face and limbs and moist eroded papules at the overscrotal fold and penoscrotal region. Posterior cervical, axillary and epitrochlear lymph nodes were enlarged. Mucous membranes were not affected. The lesion above the umbilicus was the

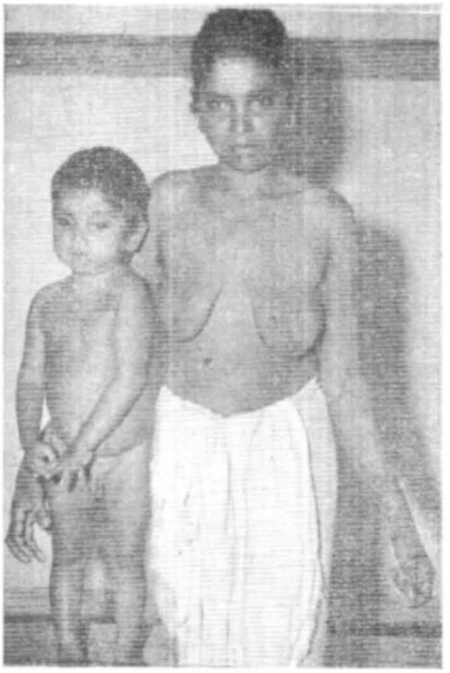


Yesudasan, with the infection of Yaws

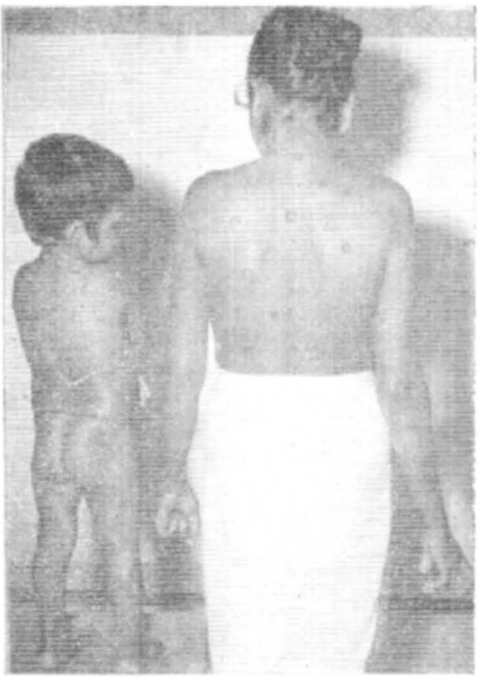
first to appear and was of 28 days' duration. All the lesions were positive by dark ground microscopy. Wassermann and Kahn tests were strong positive.

Family II

Gopi, a boy aged 1½ years was brought to the clinic on 30-6-1957. He had a large, vegetative, crusted, papuloulcerative lesion about ½ inch above the left cubital fossa and extensive hypertrophic, papular lesions on the trunk, face and limbs. Genitalia and mucous membranes were not affected. The lesion on the left arm was the first to appear and had a week's duration. All lesions were positive on dark ground examination. Wassermann and Kahn tests were strong positive. His parents and elder sister were negative clinically and serologically. The sister and an aunt were reported to have had similar lesions some months ago for which they were treated elsewhere with a number of injections, presumably Penicillin.



Front View.



Back View.

(1) Appu, two-year old boy, infected with Yaws.

(2) Appu, with his mother, Maria who was also infected.

Eight weeks later, on 24-8-1957, his mouths Kunji, aged 18 years, reported with a crusted papolo-pustular lesion on the face at the middle of the right mandible and two smaller crusted lesions on the right side of the chest. She was not sure which lesion appeared first. They were of one week's duration and treponemes could be demonstrated from all of them by dark ground microscopy. Wassermann and Kahn tests were strong positive.

The following were the criteria which led to the diagnosis of Yaws in the above cases:

(1) Presence of extragenital primary lesions,

(2) florid characteristic cutaneous manifestations,

(3) non-venereal mode of transmission,

(4) the presence in the lesions of Treponema pertenue (indistinguishable morphologically from the Treponema pallidum of syphilis)

(5) positive serological tests for shphilis,

(6) response to Penicillin

and (7) the awareness of the existence of endemic foci of Yaws in the locality.

Even though some of the features in these cases suggested the possibility of non-venereally acquired syphilis, the presence of ulcerating and scabbed excrescence-like cutaneous lesions and the absence of the usual "mucosal and muco-cutaneous eroded popular lesions affecting the buccal, labial and anogenital regions" and history of pain in the bones made the diagnosis of Yaws more likely. Radiograms were taken in all cases, but bone involvement was not seen in any of the above cases.

Each time a patient attended the clinic, all the other members of the family were examined clinically and serologically for evidence of infection or re-infection. But epidemiclogical doses of Penicillin (4 ml. of Procaine Penicillin with Aluminium Monostearate P.A.M.) were with-held from the contacts for purpose of following up the chain of infection. They were however impressed that they should report to the clinic immediately if any similar lesions appeared on their body.

In spite of vigorous measures of eradication of the W.H.O. and other agencies, Yaws remain a big medical problem especially in the under-developed countries. Guthrie (1960) reports that some 15 years ago, when Treponematosis was at its post-war peak, there were some 50 million cases of Yaws. About 10% of those infected with Yaws become invalids through hand or foot lesions. (Inspite of vigorous measures of eradication by the W.H.O. and other agencies Yaws remain a big medical problem, especially in the under-developed countries.) (Guthrie 1960). Thus this disease presents a grave threat to the individual and the community at large. In meeting this challenge, the primary requisite is an awareness of the condition in the mind of the clinician. To emphasize that, is the purpose of this paper.

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