CUTANEOUS LEISHMANIASIS (ORIENTAL SORE)*†

A CASE WITH CORNEAL INVOLVEMENT

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PROTOZOA of the genus *Leishmania* cause at least three distinct diseases. All are transmitted by the bite of sandflies of the genus *Phlebotomus*. The diseases are Kala azar (visceral leishmaniasis) due to *L. donovani*, cutaneous leishmaniasis (oriental sore) due to *L. tropica*, and muco-cutaneous leishmaniasis (South American leishmaniasis) due to *L. brasiliensis*.

Oriental sore, or cutaneous leishmaniasis, tends to occur in local areas, and has accumulated a host of names such as Baghdad boil, Jericho boil, Aleppo boil, Delhi boil, and Quetta sore. It is endemic in India, Pakistan, Iran, Iraq, Syria, Turkey, S. Russia, the Mediterranean littoral, Abyssinia, the Sudan, Nigeria, and China (Hargreaves and Morrison, 1965).

The clinical picture of cutaneous leishmaniasis is characterized by the appearance of small papules on the exposed areas of skin. These enlarge and become scaly, and the crusts fall off to leave suppurating sores, which usually become surrounded by oedema (wet type). However, a dry indolent lesion is also common. A relapsing, chronic form, clinically very similar to lupus vulgaris, has been described as leishmaniasis recidivous. Secondary sores may form around the primary lesion or infection may be transferred to remote situations by scratching (Chams, 1930). Healing usually takes place within one year, but occasionally may last longer and some lesions have remained active for 30 years. Scarring and cicatrization may be extensive, and eyelid deformities are common. Direct involvement of the cornea has rarely been reported (Donatelli, 1950; Gandolfi, 1952; Pestre, 1955; Scuderi, 1947), although corneal exposure due to lid deformities is not uncommon (Duke-Elder, 1965). In leishmaniasis due to *L. brasiliensis* direct corneal involvement, rare as it is, appears to be more common (Dusseldorp, 1928; Carvalho, 1935; Spinola, 1937; Marback, 1953).

Treatment consists of parenteral administration of sodium stibogluconate (Pentostam B.W.), and amphotericin B (Fungizone, Squibb) has been demonstrated as an effective treatment in cases resistant to the antimalarial drugs. However, local infiltrations of the lesions with 10 per cent. mepacrine, 1 per cent. berberine sulphate, 2 per cent. emetine have all been used with some degree of claimed success (Hargreaves and Morrison, 1965).

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Case Report

A 17-year-old Sikh patient, who had left the Punjab at the age of 13½ years and had lived in England ever since, came to the Eye Clinic complaining of pain in the right eye for the last 6 days.

Examination.—Deep and superficial keratitis with a mild anterior uveitis were noted. The left cornea appeared to be normal. A scaly lesion was noted over the right malar region (Fig. 1). The patient said that this lesion had been present for 5 or 6 years and was now increasing in size. A biopsy of this lesion showed Leishman-Donovan (L-D) bodies and a diagnosis of cutaneous leishmaniasis was made.

FIG. 1.—Lesion of cutaneous leishmaniasis before treatment.

FIG. 2.—Lesion of cutaneous leishmaniasis after treatment by intra-lesional injections of mepacrine 10 per cent.

Treatment and Progress.—During this period the keratitis was becoming severe and the visual acuity was reduced to 5/60, in spite of treatment with atropine and steroid drops. Treatment of the skin lesion by infiltration locally with 10 per cent. mepacrine solution was followed by rapid flattening of the area of the eruption (Fig. 2). Over the same period the keratitis became completely inactive and visual acuity returned to 6/6. A few areas of white scarring in the stroma remained (Fig. 3).

Discussion

This case is interesting in that it appears to demonstrate the somewhat unusual complication of keratitis due to *L. tropica* and the extremely chronic nature of the skin lesions due to this organism. The patient had been outside the range of the insect vector for over 3 years. It is also of interest that the keratitis, which was of a severe character, subsided as the skin lesion became inactive (Andrade, 1942). Finally, such a case serves as a reminder that this condition must be considered as a cause of keratitis in any patient who has been in an endemic area during the past two or possibly three decades and who has a chronic granulomatous skin lesion anywhere on the body, especially in an exposed area.

FIG. 3.—Corneal lesion at the stage of scarring.

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