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ENDGAMES

SPOT DIAGNOSIS

A forgotten and hidden disease

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A 50 year old man presented to a clinic with a two year history of multiple hypopigmented patches spread over the trunk and all four limbs (fig 1). The patches were variable in size with central clearing; some margins were well defined and some poorly. Hair growth over the lesions was sparse, and he had loss of sensation over some of the patches. The peripheral nerves—ulnar, lateral popliteal, and posterior tibial—were thickened, with mild weakness in the muscles they supplied, but there was no loss of sensation in the hands and feet. A slit-skin smear was positive for acid fast bacilli. The skin biopsy showed markedly atrophied epidermis, with focal granulomatous infiltration seen in the papillary dermis. Granuloma consists of macrophages and a few lymphocytes with AFB 3-4+bacilli seen.

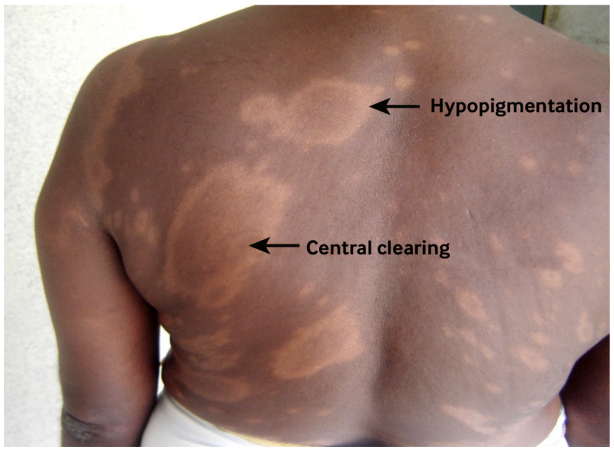

Fig 1 Multiple hypopigmented patches of variable sizes. Central clearing and satellite lesions are visible

What is the diagnosis?

Answer

Short answer

Multibacillary leprosy (as per World Health Organization classification).

Discussion

Leprosy is a chronic infectious disease caused by*Mycobacterium leprae*, an acid-fast, rod shaped bacillus affecting the skin, peripheral nerves, and mucosa. Leprosy is curable, and treatment in the early stages can prevent disability. According to a World Health Organisation expert committee, a diagnosis of leprosy can be made when one or more of the following cardinal signs is present: definite loss of sensation in a hypopigmented or reddish skin patch; a thickened peripheral nerve with loss of sensation and/or weakness of the muscles supplied by the peripheral nerve; and/or the presence of acid-fast bacilli in a slit-skin smear.[1]

The differential diagnosis for hypopigmented lesions includes pityriasis alba, tinea versicolour, lupus vulgaris, sarcoidosis, and granuloma annulare.

The World Health Organization classifies leprosy into paucibacillary and multibacillary, based on the number of skin lesions, nerve involvement, and acid-fast bacilli in the smear. This classification is the basis for management.

The standard adult treatment regimen for multibacillary leprosy consists of rifampicin, clofazimine, and dapsone once a month, followed by a daily dose of clofazimine and dapsone for 28 days. The total duration of treatment is 12 months. In paucibacillary adult leprosy, treatment should last six months, during which rifampicin should be given once in each month, and dapsone for 28 days.[2]

Neuritis is a complication of borderline leprosy, with an incidence ranging from 8% to 35%.[3] It results from immunologically mediated lepra reactions, particularly type 1 (delayed hypersensitivity) lepra reactions. Neuritis of less than six months' duration should be treated with the standard 12 week regimen of prednisolone.[4]

Learning points

1. Leprosy should be considered an important differential diagnosis even in low incidence countries as new case detection is on the increase globally.

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2. Early detection and treatment prevent transmission, disabilities, and deformities.

We have read and understood The BMJ policy on declaration of interests and declare no competing interests.

Patient consent obtained.

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1 World Health OrganizationExpert Committee on Leprosy report. Geneva, World Health Organization, 2012. http://www.searo.who.int/entity/globalleprosy_programme/publications/8th_expert_comm_2012.pdf.
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