A case of spontaneously arising strangely shaped scars

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INTRODUCTION

Leprosy, one of the oldest recorded diseases, presents with varied and unusual clinical features. It often poses a diagnostic challenge even to the most experienced clinicians because of its morphological diversity.[1] Histoid leprosy (HL), an uncommon variant of lepromatous leprosy (LL), usually develops as a relapse in patients with LL, but it has been increasingly reported to occur de novo.[2] Prompt identification of this highly infectious entity, despite its seemingly innocuous appearance, is vital to break the chain of transmission.

We report a previously healthy patient with bizarre keloid-like plaques, penile nodules, and breast tissue infiltration.

CASE REPORT

A 44-year−old Asian man, who works as a farmer, presented to a tertiary care outpatient clinic with a 6-month history of multiple, asymptomatic, progressively increasing keloid-like plaques over his trunk, limbs, and face. There was no history of preceding trauma.

On examination, we noted multiple erythematous, succulent, and frankly keloid-like plaques, with bizarre shapes and varying sizes distributed over the trunk, arms, and thighs with a tendency of symmetry (Fig 1). They appeared to arise from normal-appearing skin. Few of the plaques had a peau d'orange appearance. A serpentine plaque over the left side of the forehead with nodular infiltration and madarosis was noted (Fig 2). Bilateral nipple and earlobe infiltration were present, and the latter was surrounded by satellite nodules. Few glistening and skin-colored circumprepucial nodules were present.

Abbreviations used:

HL: histoid leprosy
LL: lepromatous leprosy

Ulnar and radial cutaneous nerves were thickened bilaterally.

A slit-skin smear was performed from various sites, such as the forehead, ear lobes, back, and buttocks. It revealed the presence of acid-fast bacilli, with a bacteriological index of 5 and a morphological index of 80%. We performed an incisional biopsy from 1 of the plaques. The prominent histologic features were bacillary-rich leproma, composed of spindle-shaped cells arranged in whorls (Fig 3). Notably, globus formation was absent, a feature consistent in ordinary leproma. Fite stain of the skin tissue revealed abundant intracellular, long, and slender acid-fast bacilli (Fig 4). Based on these findings, a diagnosis of HL occurring "de novo" was made. The patient was initiated on 12 months of multibacillary multidrug therapy recommended by the World Health Organization. This therapy was provided in the form of blister packs every month. Day 1 medications consisted of rifampicin (600 mg), clofazimine (300 mg), and dapsone (100 mg). For Days 2 to 28, clofazimine (50 mg) and dapsone (100 mg) were administered. A full course of multibacillary multidrug therapy consists of a minimum of 12 blister packs.

DISCUSSION

HL is an uncommon variant of leprosy, with characteristic clinical, histopathologic, and

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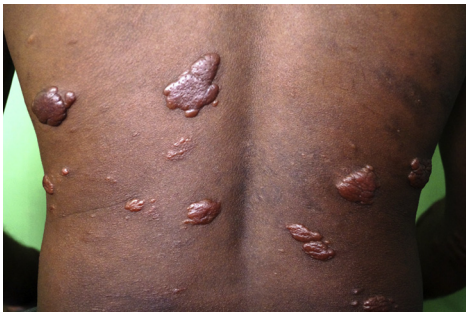

Fig 1. Multiple keloid-like plaques of varying sizes and shapes over the back.

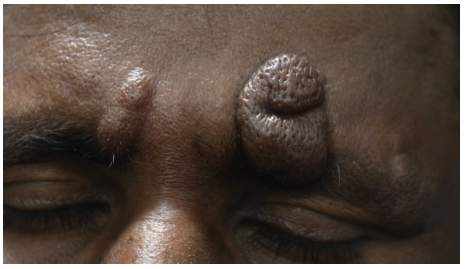

Fig 2. A serpentine plaque over the forehead with madarosis.

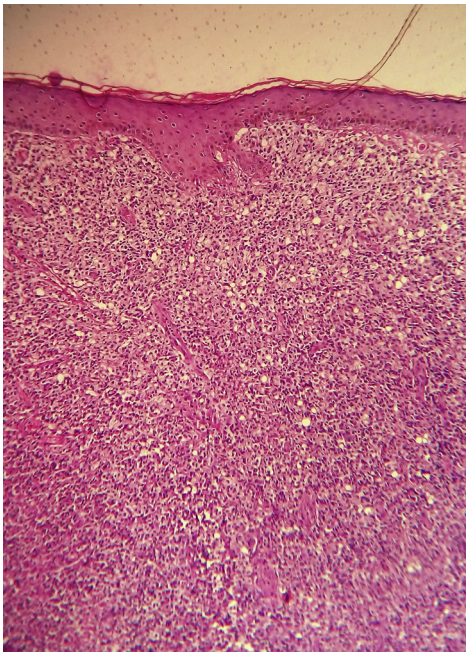

Fig 3. Multiple spindle-shaped cells arranged in whorls in the dermis. (Hematoxylin-eosin stain; original magnification: ×100.)

immunologic characteristics.[3] It occurs predominantly in patients receiving long-term dapsone therapy and those taking irregular or inadequate antileprosy treatment. Additionally, there are reports

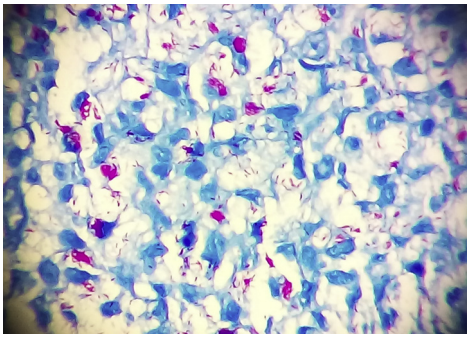

Fig 4. Abundant intracellular, long, and slender acid-fast bacilli. (Fite stain; original magnification: ×1000.)

of HL occurring as a relapse after successful treatment or occurring de novo.[4] It continues to have the same incidence rate as Wade[1] initially described in 1963; between 1.2% and 3.6%. The keloid-like lesions of HL,[5] as described in our patient, have been reported occasionally in the literature, and may cause diagnostic confusion. This is especially relevant because keloids are more common in people with dark skin.[6]

In our patient, we noted infiltration of both the nipples with hyperpigmented plaques. There are reports of nipple hypertrophy (gynaecothelia) in LL. This arises because of leprous infiltration of the area and feminization after testicular atrophy, and is usually bilateral.[7] Sehgal and Srivastava[8] defined 2 distinct types of "histoid facies." The most common type is a relic of burned-out LL with scanty/absent eyebrows, wrinkled face, and nasal bridge collapse. The other is a normal-appearing face without features of leprosy.[8] De novo HL has been reported to spare the ears,[9] unlike relapsing LL. Meanwhile, our patient had a normal-appearing face, except for the marked superciliary madarosis and earlobe nodularity. This reaffirms leprosy as a great imitator. Likewise, skin-colored and glistening circumpreputial nodules, as found in this patient, are distinctly rare, with a prevalence ranging from 2.9% to 6.6%.[10] Therefore, given its varied presentations, one cannot eliminate the possibility of leprosy at face value. This holds true even in areas declared free of leprosy.

Additionally, patients with HL are of significance to public health because of their high bacillary load. If undiagnosed and left untreated, they become reservoirs of infection, and the goal of leprosy eradication slips further away.[1,3] The uniqueness of this case lies in the keloid-like plaques of HL, with peculiar shapes and involvement of unusual sites.

The limitation of our report is the lack of follow-up data available on the patient. The need for such data should be emphasized, because it allows us to understand the long-term outcomes of HL when treated with multidrug therapy. The report also

illustrates the diverse morphological appearances of HL, which may occur even in areas of low endemicity. To eradicate leprosy, we must continue to remain vigil.

Conflicts of interest

None disclosed.

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