Bullous Reaction in Leprosy: A Rare Phenomenon

TO THE EDITOR:

Leprosy is a chronic, infectious disease with varied clinical presentations. Leprosy reactions generally manifest as erythematous edematous tender plaques (reversal reaction) or evanescent tender erythematous blanchable cutaneous nodules (erythema nodosum leprosum), with or without neuritis. Bullous types of reactions are rare and have been mostly described in Mexico and South America. In India there are few published reports mentioning pustular and bullous reactions in leprosy. We are now reporting a case of lepromatous leprosy with bullous reaction to alert physicians of this unusual clinical presentation.

CASE REPORT

A 40-year-old male patient presented with bullous lesions and crusted erosions over extremities and face, associated with fever for a duration of 3 days. He was a known case of lepromatous leprosy and had completed an adequate course of MDT for six months from another center. The patient gave a history of similar bullous lesions one-year ago for which he was given a short course of systemic steroids. The patient was not on any other medications, and his nutritional status was good.

On examination, bullae were present over the lower extremities, arms and over the ears. The bullae were flaccid containing clear fluid with some hemorrhagic, and ruptured to form slightly tender crusted erosions, (The Fig.). During admission, the patient developed a few new similar lesions while the old ones were subsiding. Nikolsky sign was negative, and there was no mucosal erosion. There was no evidence of typical nodular lesions of erythema nodosum leprosum (ENL) or neuritis. The patient was given a capsule of cloxacillin 500 mg qid and antipyretics. On slit-skin smear examination, the BI was 3+ and the MI was 0%. His routine biochemical investigations revealed leukocytosis and raised ESR. A Tzanck smear did not show any acantholytic cells. A biopsy taken from one of the lesions showed intraepidermal bulla with diffuse polymorphonuclear cell infiltrate in the dermis with a few foamy macrophages. No AFB was demonstrable on the special stain.

Six days after admission, the patient continued to develop new bullous lesions along with spikes of high-grade fever. The patient became very toxic and, at this point, developed multiple erythematous, tender, blanchable, nodular lesions classical of ENL over his trunk and his extremities. The patient was started on prednisolone 60 mg and clofazimine 50 mg daily. After 24 hours of starting the prednisolone, the patient was afebrile, and the lesions started subsiding with no formation of new nodular or bullous lesions. The patient became asymptomatic, and was discharged-on-request after one week and advised to obtain regular follow up.

DISCUSSION

Bullous eruptions are rarely observed in leprosy. Generalized bullous eruptions during treatment with rifampin (3, 5) and
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Ruptured bullae forming crusted erosions over lower extremities.

Dapsone (\(^2\)) have been reported in the past. Vesicles and bullae can be seen in the purpuric, tender, dusky, erythematous plaques of the Lucio phenomenon and in the evanescent, tender, erythematous nodules of ENL lesions. As Ramu and Dharmendra (\(^8\)) have described, bullous lesions rarely occur in a severe type of lepra reaction like the presentation in our case. Such a bullous eruption in lepromatous leprosy, as a sign of acute exacerbation reaction, is rare with only a few published reports in the literature (\(^1,4,6,7,9\)). In this, bullae appear suddenly without being preceded by any signs of inflammation in the skin. Such a presentation has been confused with other bullous disorders like pemphigus (\(^7\)) to which leprosy patients are not immune. In our patient, the onset of lesions was sudden, sparing the mucosae, and Nickolsky sign was negative. There were no acantholytic cells seen on the tzanck smear or on histopathology. Clinicians should be alerted to this rare presentation of leprosy. It needs to be differentiated from other common causes of blistering, like pemphigus, bullous pemphigoid, erythema multiforme, dermatitis herpetiformis and bullous drug eruptions.

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