Hansen’s disease, or leprosy, a chronic infection caused by *Mycobacterium leprae*, is an old and widespread disease with a higher incidence in developing countries.1 It runs a chronic indolent course that can become complicated by acute, immune-mediated phenomena called lepra reactions.2 Lucio phenomenon is one such rare reactional state seen peculiarly in the pure and primitive diffuse form of lepromatous leprosy and less commonly in borderline forms.3,4 This phenomenon was first described by Lucio and Alvarado5 in Mexico in 1852 and further elaborated by Latapi and Zamora6 in 1948 after the identification of histopathological changes involving multiple acute, necrotizing cutaneous vasculitis. It was considered a globally restricted phenomenon endemic to Mexico and Central America until sporadic cases were reported from nonendemic areas of the world, including the United States, Spain, Cuba, and countries in Southeast Asia, the Middle East, South America, and the South Pacific.1–12 It is clinically characterized by severe necrotizing cutaneous lesions, mainly on the extremities.12 Here, we present a rare case of a man with Lucio phenomenon in a previously undiagnosed case of lepromatous leprosy in India.

**CASE PRESENTATION**

A 71-year-old man presented with extensive cutaneous ulcerations over the upper and lower extremities that appeared two weeks prior. The lesions first appeared as purpuric macules over the legs, followed by the buttocks, arms, trunk, and ears. After a week, the lesions gradually became coalesced in geographic patterns and developed a dusky erythematic appearance with subsequent ulceration. The patient had a history of recurrent swelling of the legs, decreased tactile sensations over the hands and feet, and recurrent episodes of epistaxis for last few years. He had not sought medical intervention in the past for his illness. On examination, the treatment team observed diffuse infiltration of the patient’s face, ear lobules, and back, with ciliary and supraciliary madarosis and a shiny appearance of the face (Figure 1). There were extensive deep, bizarrely shaped, punched out ulcers with polycyclic margins, predominantly over the legs and buttocks, with yellowish necrotic slough and an overlying blackish adherent crust. Ulcers were surrounded by a zone of bright red infiltrated skin (Figure 2a). There were also irregularly shaped, dusky red, purpuric macules over the dorsum of the hands and extensor aspects of the forearms (Figure 2b). Further, there was bilaterally symmetrical thickening of the ulnar, radial, lateral popliteal, posterior tibial, and great auricular nerves without associated tenderness. Bilateral glove and stocking anesthesia was also present. Cranial nerve examination was normal.

**REFERENCES**

A deep, irregularly shaped ulceration with palycyclic margin with yellowish necrotic slough and overlying blackish adherent crust; surrounded by a zone of bright-red infiltrated skin; B: Irregularly shaped, dusky-red purpuric macules over the dorsum of the hands.
leprosy, which includes rifampicin, dapsone and clofazimine for 12 months. A short course of high-dose corticosteroids (1mg/kg/day) can be effective in controlling the immune reaction in the initial phase, especially in severe cases. Since Lucio leprosy is often unmasked by Lucio phenomenon, a high index of suspicion is very important for early diagnosis, and prompt treatment can improve the disease outcome in areas nonendemic for Lucio leprosy.

REFERENCES

7. Moschella SL. The lepra reaction with necrotizing

TABLE 1. Comparison of Lucio phenomenon and erythema leprosum nodosum (ENL)

<table>
<thead>
<tr>
<th>LUCIO PHENOMENON</th>
<th>ENL</th>
</tr>
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<tbody>
<tr>
<td>Usually occurs in untreated case of diffuse lepromatous leprosy</td>
<td>Usually occurs in lepromatous and borderline forms of leprosy; frequently seen after initiation of treatment</td>
</tr>
<tr>
<td>Presents as irregular jagged purpuric lesions and superficial ulceration involving feet, legs, hands, forearms, thighs, arms, and rarely, trunk and face</td>
<td>Might present as small, round, deep necrotic ulcers involving extremities and trunk</td>
</tr>
<tr>
<td>Usually not associated with fever and constitutional symptoms</td>
<td>Frequently associated with fever and constitutional symptoms</td>
</tr>
<tr>
<td>Neuritis is uncommon</td>
<td>Accompanied by neuritis</td>
</tr>
<tr>
<td>Visceral involvement is infrequent</td>
<td>Visceral involvement is frequently seen in the form of iridocyclitis, orchitis, hepatitis and neuritis</td>
</tr>
<tr>
<td>Histopathological features include colonization of the endothelial cells by acid fast bacilli, endothelial proliferation of the medium-sized vessels of the mid-dermis and vasculitis with or without thrombosis of the small vessels of the superficial dermis</td>
<td>Histopathological features include necrotizing vasculitis of small and medium-sized vessels of dermis with predominant neutrophilic infiltrate involving dermis and hypodermis</td>
</tr>
<tr>
<td>Responds well to anti-leprosy therapy (MB-MDT); high-dose steroids might be required in severe cases.</td>
<td>High-dose steroids are usually required along with anti-leprosy therapy</td>
</tr>
<tr>
<td>Do not respond to thalidomide</td>
<td>Responds well to thalidomide</td>
</tr>
<tr>
<td>Resolution is seen within 1–2 weeks of treatment and ulcers heal with superficial hypochromic scars</td>
<td>Resolution is slower</td>
</tr>
</tbody>
</table>
CASE REPORT


