## Case 11

A 24-year old Thai man from Udonthani

**Chief complaint** Relapsing fever with ulcerated lesions for 2 months.

**Present illness** 2 months ago, the patient developed high fever and painful erythematous nodules with ulcerated lesions on his face, left earlobe and both extensor surfaces of upper and lower extremities. He also experienced joint pain, epistaxis, painful swelling testes, painful swelling fingers of left hand, and pain at the sites of both ulnar nerves.

Two years ago he developed erythematous nodules on his upper extremities and was diagnosed as borderline lepromatous leprosy (BL) at Udonthani Hospital. He was treated with WHO-MDT-MB program for one and a half year, with poor compliance. Half year ago, he discontinued the medication because the active lesions had disappeared.

**Past history:** He had no other history of underlying diseases and drug allergy, no history of substance abuse and photosensitivity.

**Family history:** His grandfather was diagnosed as leprosy. No other family member had leprosy.

**Physical examination** A febrile thin young man with mild jaundice.

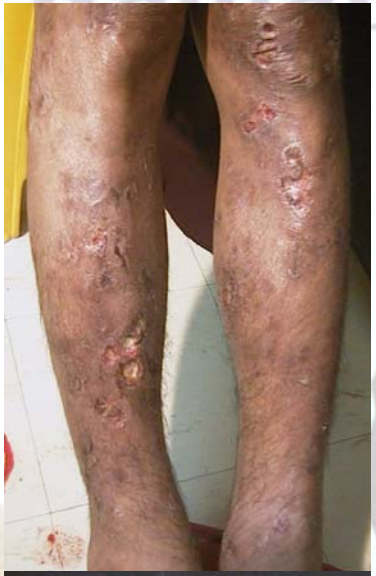
*Skin*: There were brownish-red ulcerated crusting plaques, located at left pinna, left nasal ridge, both arms, forearms, hands, thighs, legs and feet.

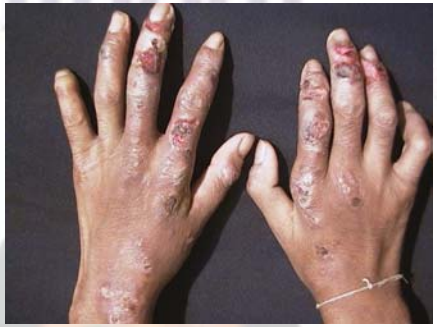
Upon careful examination, brownish patches with punch-out center with definite loss of sensation on right thigh were revealed.

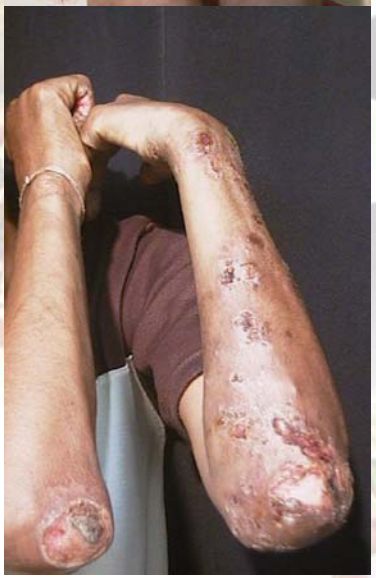
There were also erythematous plaques with scales and active border at gluteal region.

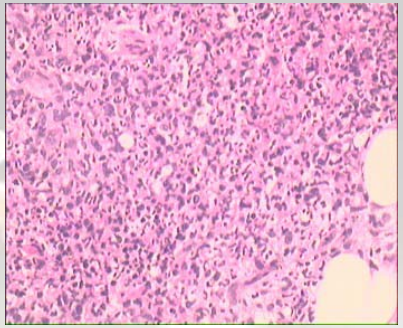
***Neurological exam***: There were enlargement of Lt. great auricular nerve, both ulnar nerves, radial nerves, common peroneal nerves and posterior tibial nerve.

There were claw hands but no foot drop.









**Investigations**

AFB- BI - lesion 4+, left earlobe 4+

Anti HIV – neg

KOH from gluteal lesion: septate hyphae.

**Histopathology:** S01-8423

- Dense inflammatory cell infiltrate of neutrophils, nuclear dust with features of leukocytoclastic vasculitis dispersed among foamy histiocytes throughout the dermis and subcutaneous tissues
- Gray cytoplasm with numerous acid-fast bacilli in foam cells
- Edematous papillary dermis
  Epidermal necrosis

**Diagnosis**

1. Borderline lepromatous leprosy with severe type 2 lepra reaction
2. Tinea corporis

**Treatment**

- Rifampicin 600 mg monthly, Clofazimine 300 mg monthly and Dapsone 50 mg dayily were given for another 6 months, in order to complete treatment of multibacillary leprosy.
- Oral Prednisolone 40 mg daily with Clofazimine 200 mg daily were given for type 2 lepra reaction(ENL)

Symptomatic treatment, bed rest and proper wound care.

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**Discussion**

Erythema nodosum leprosum (ENL) is the typical skin manifestation of type 2 lepra reactions, occur in patients with multibacillary disease, LL and BL. They may occur spontaneously or during treatment. ENL manifests most commonly as painful, red nodules on face and extensor surfaces of limbs. The lesions may be superficial or deep, with suppuration, ulceration or browny induration when chronic. Type 2 lepra reaction is a systemic disorder producing fever and malaise, and sometimes lymphadenopathy, arthralgia , epitaxis, orchitis, neuritis and acute iritis.

In this case type 2 lepra reaction occurred at one and a half year after starting treatment when the active lesions had already disappeared, and the skin smears at all sites showed granular form. If the patient did not informed that he has leprosy, it may be difficult to give the correct diagnosis as type 2 lepra reaction.

This patient had severe type 2 lepra reaction with manifestations in skin (ulcerated ENL), nerve (painful neuritis), testes (orchitis), fingers (dactylitis) and kidneys (proteinuria).

**References**

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