UNUSUAL ONSET OF LEPROMATOUS LEPROSY

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SUMMARY:

An unusual clinical form of lepromatous leprosy presented in an apparently healthy Filipino man who had been working in Qatar for eight years. There was a sudden appearance of vesiculobullous lesions over the elbows following treatment with oral antibiotics and antipyretics for a fever. The diagnosis was confirmed by biopsy.

Case Report:

A 29-year-old Filipino male, who had been working as a driver in Qatar for eight years, appeared healthy and had no history of medical problems. He went to a primary health centre seeking medical help for a sudden fever. Physical examination showed no significant findings. He was diagnosed as having an upper respiratory tract infecton and was prescribed paracetamol and an antibiotic (pirampicillin and pirmecillinam hydrochloride).

The next day the fever had subsided but the patient developed an extensive bulla measuring about 7x10 cm on the left elbow with erythema and darkening of the affected skin. Three smaller lesions were on the right elbow (Fig. 1&2). In the following 24 hours several other maculopapular lesions developed on the upper extremities and trunk, similar to, but not typical of herpes iris lesions of erythema multiforme. His general condition at that time was fairly good, and there were no other positive findings. He was thought to have the vesiculobullous form of erythema multiforme induced either by the infection, or by the medications.

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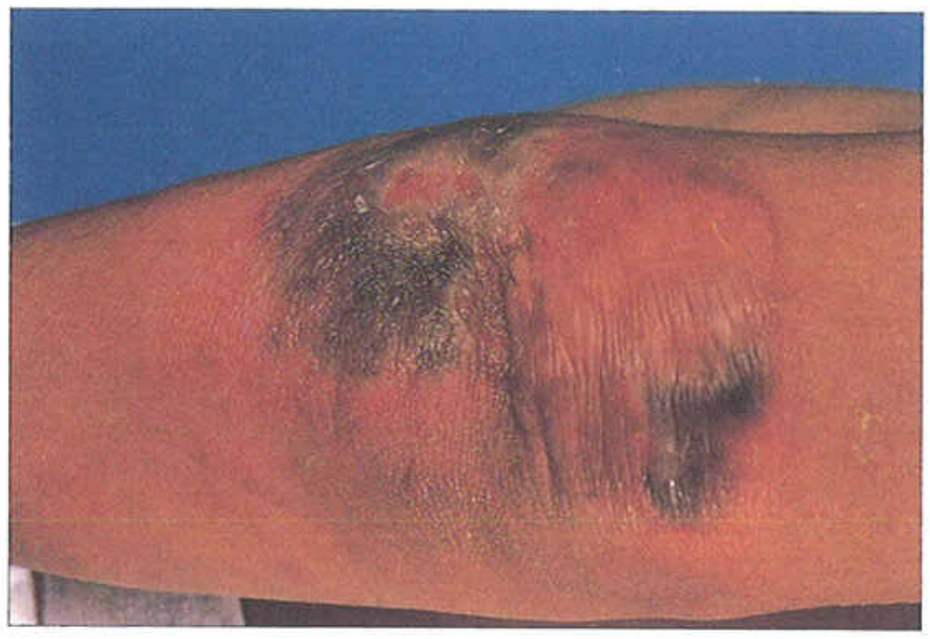

Fig. 1 Extensive bulla on the left elbow

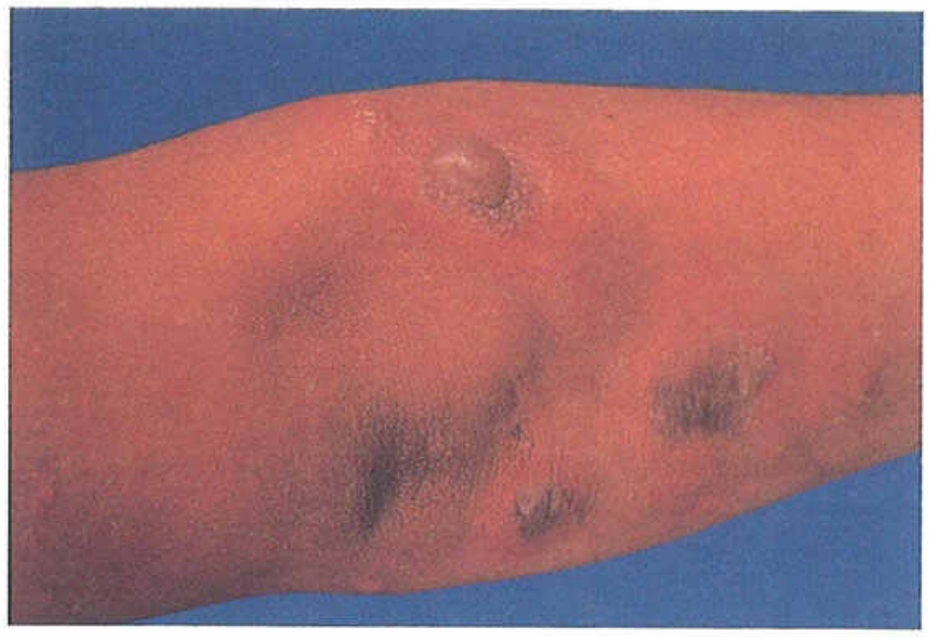

Fig. 2 Three small bullous lesions on the right elbow

Investigations:

A skin biopsy was taken from the bulla on the left elbow. First complete blood count (CBC) showed a leucocytosis of 21 x 10^3/l with a shift to the left, which increased to 23 x 10^3/l WBCs in the following 48 hours. Blood culture, culture of a swab from a discharging lesion and Gram stain of the swab did not show bacteria.

The patient was prescribed potassium permanganate solution 1/8000 as wet compresses twice daily for 10 minutes, systemic antihistamines, vitamin C 500 mg. twice daily, cefaloxin 500 mg six hourly and systemic prednisolone to reduce the severe inflammatory process, 20 mg daily for 5 days pending the results of the biopsy. After 5 days of this treatment, the patient's general condition improved; the vesiculobullous lesions dried forming necrotic crusts (Fig. 3).

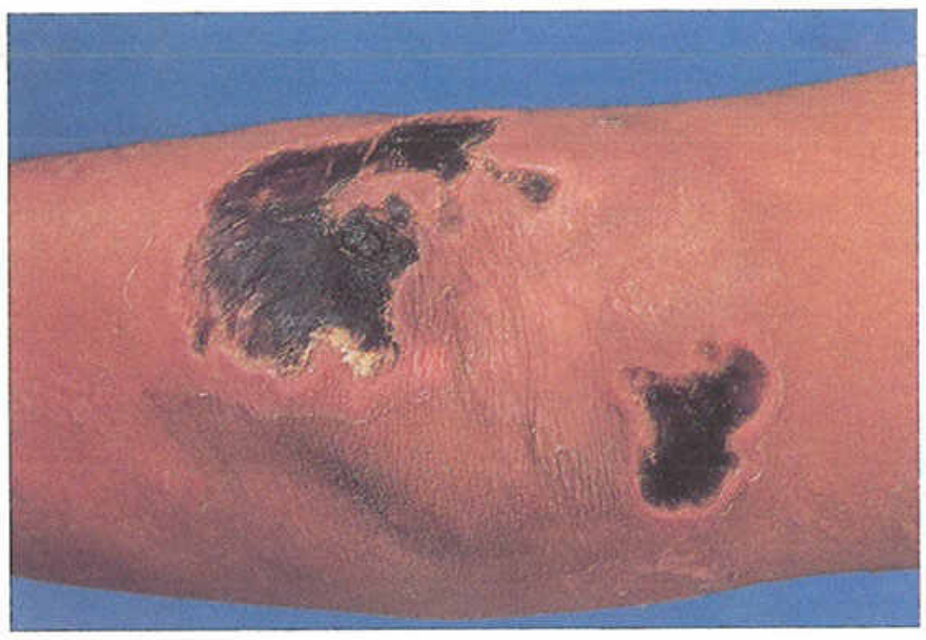

Fig. 3 Necrotic crust at the site of the extensive bulla

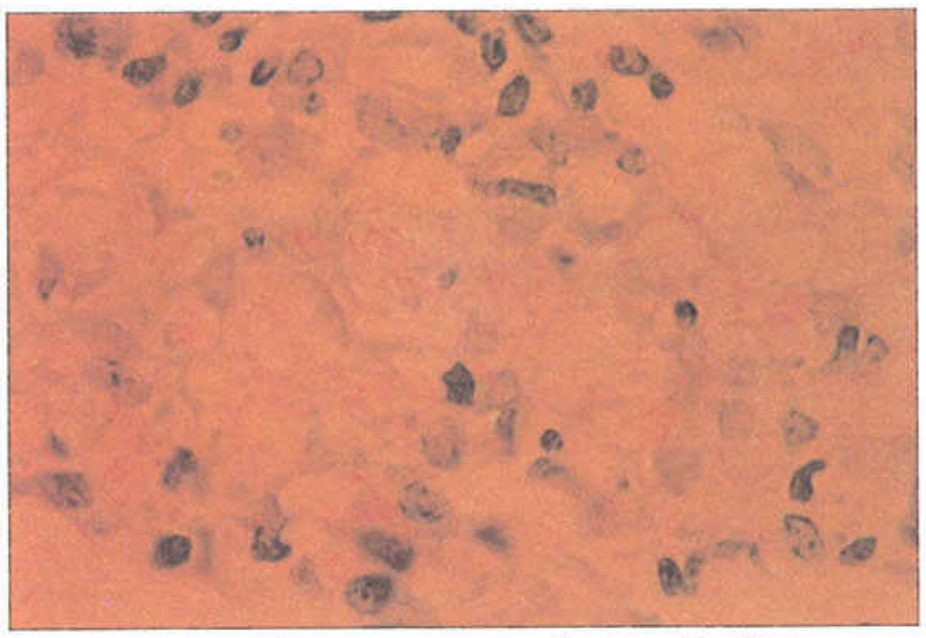

Fig. 4 Fit's stain showing numerous clusters of acid fast bacilli

Histological examination: an intradermal bulla, prominent periadnexal, as well as interstitial, patchy aggregates of foamy and clear-celled lepra macrophages. Fit's stain showed numerous clusters of acid fast bacilli (Fig. 4). The diagnosis of lepromatous leprosy (LL) was made.

Follow-up: In the light of the histological diagnosis, the patient was re-examined for further manifestations of leprosy including loss or impairment of sensation, nerve thickening, epistaxis, loss of the lateral one third of the eye brows, but all were within normal limits. All previous medication was discontinued and modified treatment for multibacillary leprosy was started:

1. Rifampicin 600 mg daily for two weeks, then reduced to 600 mg once monthly[1,2].
2. Clofazimine 50 mg daily, and the 300 mg once monthly
3. Dapsone 100 mg daily. In the following month, the patient returned to his country and there was no further follow-up.

Discussion:

There are few publications related to bullous eruptions in leprosy. Some authors consider it an unusual bullous reaction in borderline leprosy and others as Hansen's disease with bullous manifestations[3,4].

Twenty patients with histological confirmation of Erythema nodosum leprosum (ENL) in leprosy were studied from 1982 to 1986[5]. They had a range of clinical signs, from fever, tender dusky nodules, bullae, ulcers to lymphadenopathy, arthralgia and neuritis. There were four major histological patterns :

a) classical pattern showing heavy infiltrations of neutrophils in three cases, b) sub-epidermal bulla pattern with marked oedema of the upper dermis, and collections of neutrophils in five cases, c) vasculitis pattern, with dilation, congestion, lumenal fibrin clots and fibrinous necrosis f superficial and min-dermal vessels leading to epidermal necrosis, bulla formation and ulceration, d) non-specific picture in nine cases with mild oedema, infiltration with neutrophils. Two cases with minimal reaction had chronic ENL with clinical vasculitis[5]. Bullous eruption is an unusual clinical manifestation of leprosy reported in 1985[6] and preveiously as a reaction to treatment with dapsone and refampicin[7,8]. The diagnosis of leprosy in our seemingly healthy patient could have been missed had it not been for the histopathological evidence of the biopsy from the bulla, although the actual cause of the bullous eruption is perhaps still debatable.

REFERENCES :

1. Rao RJ, Mohd. Mohamed Kn. Dermatological disorders resembling leprosy. Singapore-med-J. 1989: June 30 (3) 265-8.

2. Rao PS: Initial intensive therapy for multibacillary leprosy patients. Lepr. Rev. 1992 Dec: 63 (4); 350-7.

3. Singh K: An unusual bullous reaction in borderline leprosy. Lepr-Rev. 1987 Mar: 58 (1); 61-7.

4. Privat Y, Faye I, Boisson ME: [Hansen's disease with bullous

manifestations] Bull-Soc-Fr-Dermatol-Syphiligr. 1967: 74 (5); 578-80.

5. Giam YC, Ong BH, Tan T: Erythema nodosum leprosum in Singapore. Ann-Acad-Med-Singapore. 1987 Oct: 16 (4); 658-62.

6. Periaswamy V, Rao VS: A case report of bullous reaction in leprosy. Indian-J-Lept. 1985 Oct-Dec: 57 (4); 870-1.

7. Dutta RK: Erythema multiforme bullosum due to dapsone. Lepr-India. 1980 Apr: 52 (2); 306-9.

8. Nigam P, Dayal SG, Goyal BM: Erythema multiforme bullosum due to rifampicin. Lepr-India. 1979 Apr: 51 (2); 249-51.