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ERYTHEMA NODOSUM LEPROSUM AS AN INTIAL MANIFESTATION IN HANSEN'S DISEASE

Dermatology

Dr. Bindu Priya G Postgraduate, Department of Dermatology, venereology and leprosy, Alluri sitarama raju academy of medical sciences, eluru, Andhra pradesh

Dr. D.v Praveen Kumar Raju Associate professor, Department of Dermatology, venereology and leprosy, Alluri sitarama raju academy of medical sciences, eluru, Andhra Pradesh

Dr. K. Hari Krishna Babu Professor, Department of Dermatology, venereology and leprosy, Alluri sitarama raju academy of medical sciences, eluru, Andhra Pradesh

Dr. Nirupama Bhagya Lakshmi Tatavarti* Professor, Department of Dermatology, venereology and leprosy, Alluri sitarama raju academy of medical sciences, eluru, Andhra Pradesh *Corresponding Author

ABSTRACT

Introduction: Leprosy is an ancient disease that is still with us, despite the WHO's drive to eliminate it as a public health problem. Leprosy is a chronic disease with, in general, a long incubation period. It has a wide clinical spectrum determined by the host immune system. It may lead to disability, particularly during acute exacerbations called reactions. We will present 3 patients with tender erythematous skin lesions who were originally diagnosed with a febrile illness and treated. Subsequently, they were diagnosed to suffer from leprosy. **Objective:** To make physicians aware that Erythema Nodosum Leprosum (ENL) should be in the differential diagnosis in any patient with tender and painful erythematous lesions of the skin. This ENL could be the presenting manifestation of Borderline Lepromatous or Lepromatous Leprosy. Patients and methods :Three patients presented with tender erythematous skin lesions with no proper diagnosis. Their history revealed acute and chronic episodes. A careful clinical examination was done, and biopsy taken. **Results:** The clinical examination and history taking led to a differential diagnosis of leprosy, sweet syndrome, and panniculitis. Histopathology suggested ENL. Fite-Faraco staining showed acid-fast bacilli and slit skin smears were positive. A diagnosis of leprosy with ENL was made Limitations:Since it is a case study nothing can be said about the prevalence of ENL as the first manifestation of leprosy.We were unable to classify the spectrum. **Conclusions:** ENL as a symptom of leprosy can be missed by unsuspecting physicians. Tender skin lesions with fever should ring a bell. Early diagnosis and timely treatment may prevent disabilities and increase the quality of life.

KEYWORDS

Erythema Nodosum Leprosum, ENL, Hansen disease, leprosy, Tender skin lesions

INTRODUCTION

Leprosy is an ancient disease that is still with us, despite the WHO's drive to eliminate it as a public health problem. It may lead to disability, particularly during acute exacerbations called reactions. We will present 3 patients with tender erythematous skin lesions who were originally diagnosed with a febrile illness and treated. Subsequently, they were diagnosed to suffer from leprosy.

OBJECTIVE

To make physicians aware that Erythema Nodosum Leprosum (ENL) should be in the differential diagnosis in any patient with tender and painful erythematous lesions of the skin. This ENL could be the presenting manifestation of Borderline Lepromatous or Lepromatous Leprosy.

PATIENTS AND METHODS

Three patients presented with tender erythematous skin nodules with no proper diagnosis. History taking revealed multiple episodes.The clinical examination and history led to a differential diagnosis of sweet syndrome, and panniculitis. Skin biopsy was sent for confirmative diagnosis.

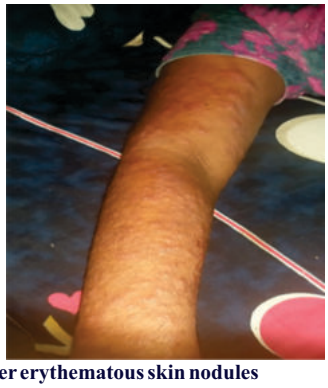

Figure 1:Tender erythematous skin nodules

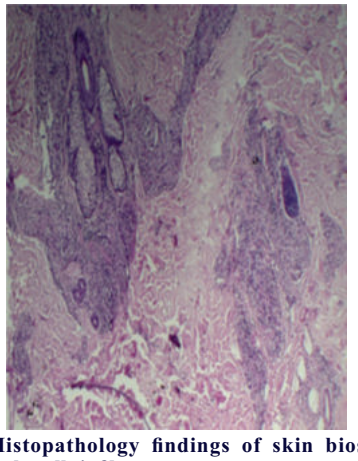

Figure 2: Histopathology findings of skin biosy showing neurovascular bundle infiltrate.

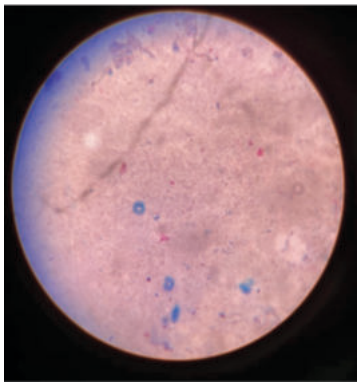

Fig 3: Slit skin smear showing bacilli.

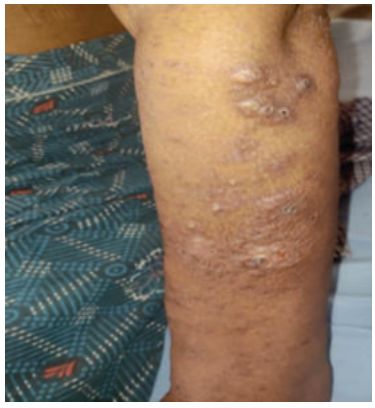

Fig 4: Atrophic scars and ulcerated nodules

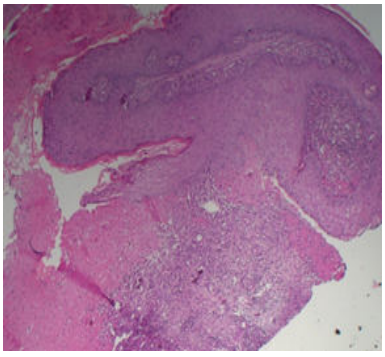

Fig 5:Histopathology suggestive of Erythema nodosum leprosum

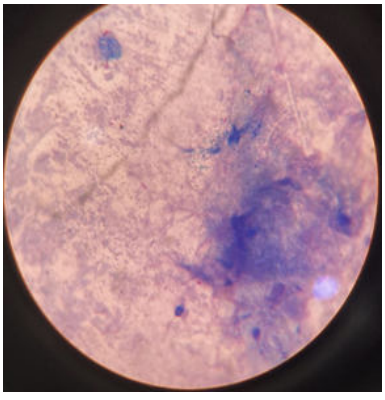

Fig 6: slit skin smear stained for bacilli

Case Report 2

57 yr old male with recurrent on/off painful erythematous lesions since 4 years over body, more on trunk. Lesions subsided with Oral prednisolone prescribed by local practitioner. H/o joint pains, fever, fatigue present. On examination - ulcerated nodules ,multiple atrophic scars(fig 4) and post inflammatory hyper pigmentation observed. As differential diagnosis sweets syndrome and erythema nodosum were considered.

Labs were in normal limits ,slit skin smear was positive for bacilli (fig 6) and biopsy confirmed Erythema nodosum leprosum.(fig 5).

Case Report 3

33 yr old female with multiple, tender, well defined erythematous nodules over extremites and trunk since 2 months . H/o prior episodes a month ago. No h/o joint pains / fever. No comorbidities. Differential diagnosis were erythema nodosum, panniculitis and sweets syndrome considered. Labs-Raised leucocyte count, ESR 96 mm/hr.slit skin smear negative but biopy proved erythema nodosum leprosum.

DISCUSSION

ENL is an acute type 2 lepra reaction in the chronic course of LL and BL. Occurs in upto 25% cases usually during or after treatment. Sometimes it is also reported as the first clinical manifestation of leprosy,which can cause delay in diagnosis. All our 3 patients had no prior history or clinical signs suggestive of hansen disease. Only 1 had glove and stocking sensory loss. In such patients, the absence of skin lesions suggestive of hansen disease could be due to complete lack of TH1 immune response and TH2 over production of antibodies . Switch to TH1 response results in massive release of bacilli from macrophages leading to immune complex mediated type 3 hypersensitivity producing neuritis and end lesions.

CONCLUSIONS.

ENL as a symptom of leprosy can be missed by unsuspecting physicians. Tender skin lesions with fever should ring a bell. Early diagnosis and timely treatment may prevent disabilities and increase the quality of life.

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