Department of Health
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A Case of Erythema Induratum of Bazin: Uncovering The Link to Tuberculosis

Clinical Infectious Diseases (Bacterial, Fungal, Mycobacterial, Parasitic)
Tuberculosis and other Mycobacterial Infections

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I. Introduction

Erythema Induratum of Bazin (EIB) is a hypersensitivity reaction to *Mycobacterium tuberculosis*, it can occur with both active and latent TB infection.

II. Case Presentation

A **21-year-old immunocompetent Filipino woman** presented to the RITM Dermatology Clinic with a one-month history of painful *erythematous nodules* on the posterior aspect of both legs, without any constitutional symptoms of tuberculosis. She denied exposure to an active tuberculosis patient. A *skin biopsy and relevant workup were performed*, including ASO titer, hepatitis profile, chest X-ray, tissue culture, and tissue PCR for tuberculosis, all of which were negative.

However, **IGRA** was **positive**, and **histopathology** revealed *mild spongiosis of the epidermis with dense inflammatory infiltrates composed of lymphocytes, histiocytes, neutrophils, and multinucleated giant cells with vasculitis*. These findings supported a diagnosis of lobular panniculitis consistent with EIB, leading to her referral to the Tuberculosis Clinic for evaluation.

Further workup for active tuberculosis and other immunologic and infectious causes of nodular vasculitis was unremarkable. However, a high-resolution chest CT scan revealed a **tree-in-bud pattern** in the right upper lobe, *indicative of active pulmonary tuberculosis*. As a result, anti-TB medications were initiated, and she was treated for active pulmonary TB disease.

III. Conclusion

Identifying an **active source of tuberculosis** before initiating anti-TB medications for EIB is crucial for *optimizing treatment outcomes and preventing unnecessary drug exposure*.

Since EIB is a tuberculid, it represents a **hypersensitivity reaction** to Mycobacterium tuberculosis, often linked to latent or active TB. Detecting an active source ***ensures targeted treatment, reducing the risk*** of drug resistance and relapse.

Documentation

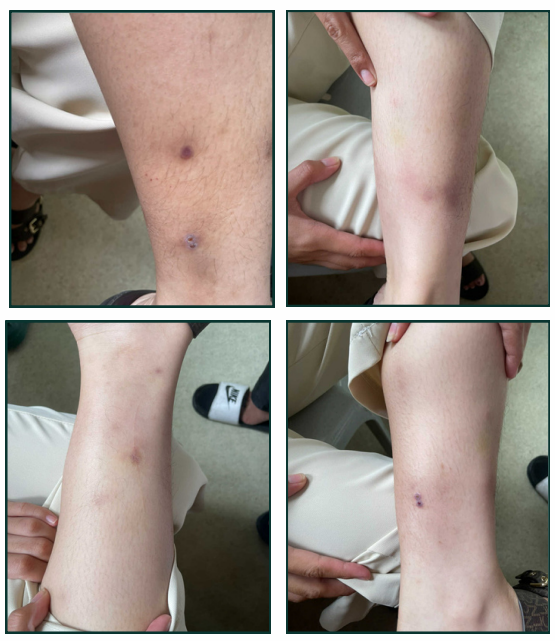

Fig. 1A (On initial consultation)
Shows image of the multiple erythematous nodules on the lower legs

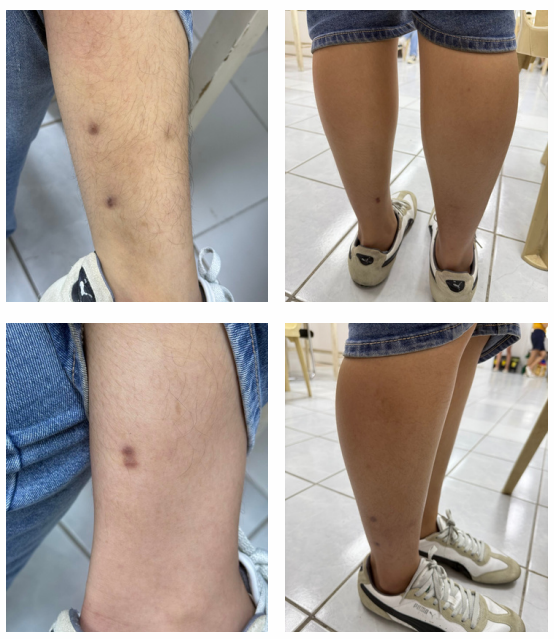

Fig. 1B (After completion of treatment)
Shows image of the residual scarring of the multiple erythematous nodules on the lower legs

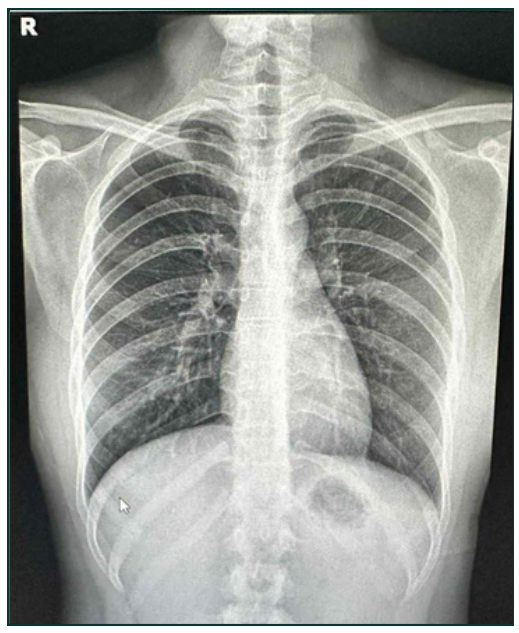

Fig. 2A
Chest X-Ray showing no significant chest findings

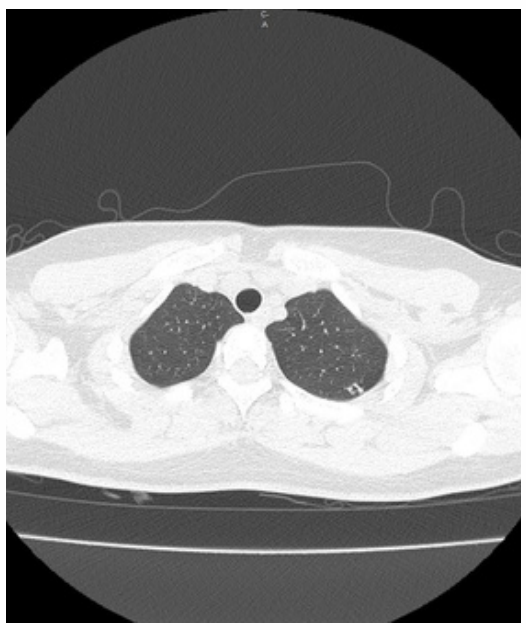

Fig. 2B
CT-Scan of the Chest showing minimal tree-in-a-bud (as highlighted in the image) densities seen in the left upper lobe

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