Clinical Images: Bazin's Disease (Erythema Induratum)

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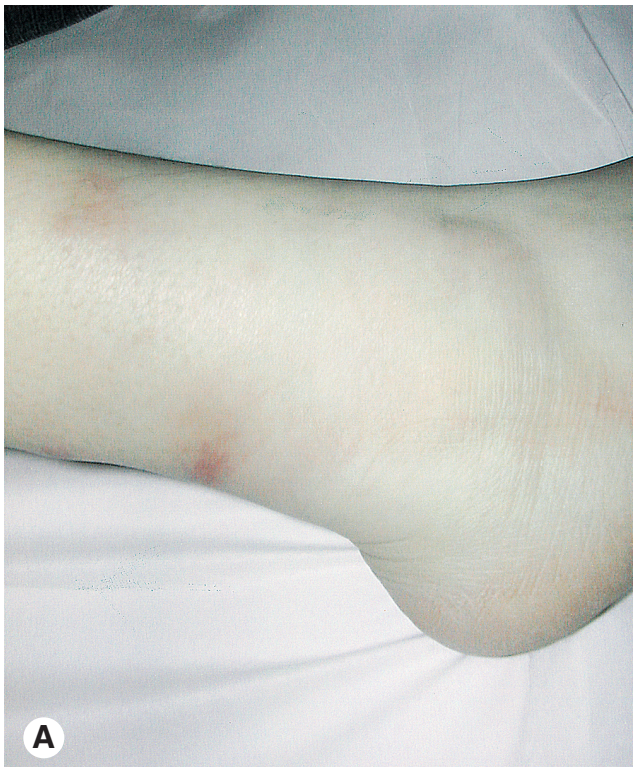
Our case highlights the similarity between erythema nodosum (EN) and erythema induratum (EI) and illustrates the importance of Mantoux testing in investigations of patients with vasculitis, particularly those from tuberculous-endemic areas; as well, it points to the need for biopsy if apparent EN has atypical or prolonged course or is complicated by ulceration, and the resolution of EI with anti-TB treatment alone.

A 16-year-old Indonesian girl with a 2 year history of Sjögren's syndrome (SSA/SSB-positive) and hepatitis C and taking no medications presented with a 2 week history of painful erythematous nodules over the anterior aspect of her lower limbs (Figure 1A) and forearms. The clinical picture was that of EN. Investigations including a chest radiography were normal, apart from positive Mantoux with 20 mm induration. Biopsy of a nodule showed granulomatous inflammation extending from the dermis into the panniculus, with no evidence of nerve or vessel involvement (Figure 1B). Ziehl-Neelsen stains for *Mycobacterium tuberculosis* were negative, as was DNA polymerase chain reaction (PCR). A diagnosis of EI was made and the patient commenced anti-TB treatment. Followup several weeks later showed resolution of the skin lesions.

Bazin's disease (EI) is an under-recognized chronic recurrent condition characterized by painless, deep-seated, subcutaneous induration, which gradually extends to the skin surface, forming bluish-red nodules or plaques, which then often ulcerate[1,2]. The morphologic, molecular, and clinical data suggest that EI represents a hypersensitivity reaction to tubercle bacillus[3]. As described, it is not unusual to have negative cultures and fail to detect *M. tuberculosis* by PCR amplification[2,4].

REFERENCES

1. Bayer-Garner IB, Cox MD, Scott MA, Smoller BR. Mycobacteria other than Mycobacterium tuberculosis are not present in erythema induratum/nodular vasculitis: a case series and literature review of the clinical and histologic findings. J Cutan Pathol 2005;32:220-6.
2. Jacinto SS, Nograles KB. Erythema induratum of Bazin: role of polymerase chain reaction in diagnosis. Int J Dermatol 2003;42:380-1.
3. Schneider JW, Jordaan HF. The histopathologic spectrum of erythema induratum of Bazin. Am J Dermatopathol 1997;19:323-33.
4. Vieites B, Suarez J, Penaranda M, et al. Recovery of Mycobacterium tuberculosis DNA in biopsies of erythema induratum — results in a series of patients using an improved polymerase chain reaction technique. Br J Dermatol 2005;152:1360-98.



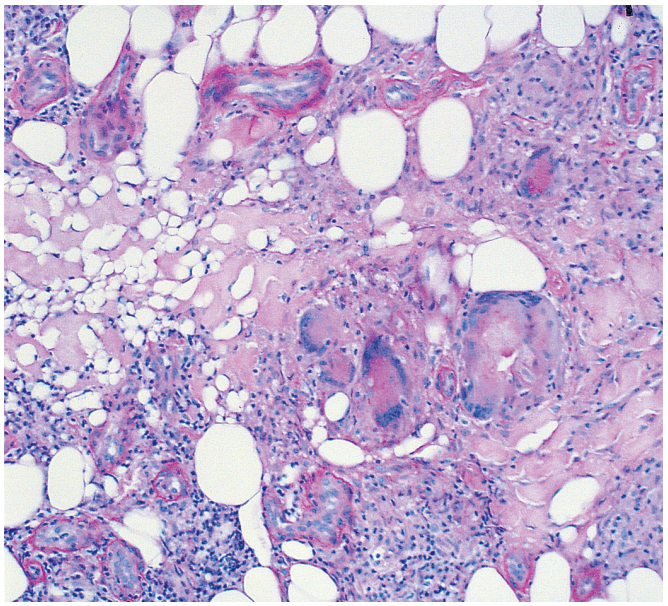


Figure 1. A. Vasculitis lesions were red, tender, raised, and predominantly over the anterior aspect of the leg. B. Histopathological findings from a subcutaneous nodule biopsy on the lower leg, showing florid granulomatous inflammation. No organisms were seen. Special stains for mycobacterium and fungi were negative.