

ANSWER TO IMAGE QUIZ ON PAGE 48

A possible diagnosis of leprosy was kept and a repeat FNAC was performed at our hospital which revealed the same features as reported previously. However, a modified Zeihl-Neelson (ZN) staining using 1% acid-alcohol revealed plenty of acid-fast bacilli (AFB) accounting for 6+ bacteriological index, according to Ridley's logarithmic scale (**Fig. 2**). The cytological smears were diagnosed as having lepromatous lymphadenitis based on these findings. Subsequent skin biopsy showed features of lepromatous leprosy with erythema nodosum leprosum (ENL).

Leprosy and tuberculosis can be associated with foamy macrophages in the lymph nodes.¹⁻³ Accumulation of foamy macrophages without epithelioid cell granulomas, minimal or absent necrosis, and macrophages containing plenty of acid-fast bacilli point to lepromatous lymphadenitis in the appropriate clinical setting.³ A concomitant leprosy and tuberculosis infection has also been reported previously.⁴ The ZN stain is used to identify *M. tuberculosis* as well as *M. leprae*. However, the methods of detecting specific organisms vary; 1% and 3% acid-alcohol are used for detecting *M. leprae* and *M. tuberculosis*, respectively. The presence of foamy macrophages with AFB along with neutrophils indicates lymph node enlargement caused by ENL reaction⁵, which was present in our case.

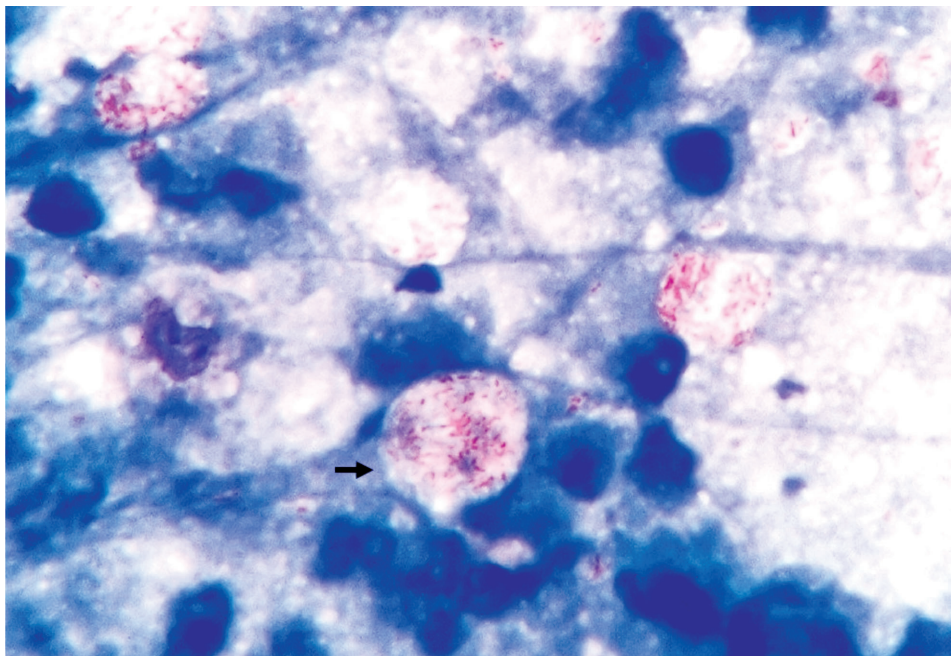


Fig.2 Acid fast bacilli stain by modified Ziehl-Neelson technique shows large numbers of singly as well as clustered globi (arrow) of *Mycobacterium leprae* (1000X).

CONTRIBUTORS: All authors were involved in patient management, literature review and drafting of manuscript. All authors approved the final version and are accountable.

COMPETING INTEREST: None; Funding: Nil.

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