

PURE NEURITIC LEPROSY (PNL) – THE IMPORTANCE OF EARLY FASCICULAR NERVE BIOPSY

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Background

Pure neuritic leprosy (PNL) has constantly been a paradox due to its clinical and management uncertainties. It is tricky to diagnose due to the absence of skin lesions.

Case presentation

A 26-year-old Indian male presented to our hospital with gradually progressive hypoesthesia on the inner aspect of the right hand associated with mild difficulty in holding objects. It worsened in severity and extended gradually up to the inner aspect of the distal forearm over the next 1 year. He developed an unnoticed burn on the inner aspect of his right wrist which resolved on his own with some over the counter medications. Right ulnar nerve thickening was palpable at the elbow joint. The patient's NCV revealed peripheral neuropathy. The criteria for diagnosing PNL are as follows- (1) Clinically, the patient presents with peripheral neuropathy. (2) The patient is from an endemic area or has a family history of leprosy. (3) Peripheral nerve thickening on palpation. (4) Typical ENMG abnormalities. (5) Absence of other co-morbidities including diabetes mellitus, autoimmune diseases, paraproteinemia or other systemic disorders. (6) Absence of any skin manifestation.

Due to the high index of suspicion, we performed a fascicular nerve biopsy. Nerve biopsy revealed well to ill-formed epithelioid cell granulomas, neural fibrosis, lymphocytic inflammation and foam cells; suggestive of pure neuritic leprosy. Leprosy treatment was started and he responded well.

Conclusion

- The gold standard for confirmation of pure neuritic leprosy is by nerve biopsy.
- Early identification of pure neuritic leprosy and its treatment is of great benefit. /ul

