

Book Review

Peripheral Neuropathy—The Continuing Challenge. A Doctoral Thesis for the University of Utrecht.

Willem Herman van Brakel (1994)

The underlying hypothesis of this thesis, reprinted in full, is that early detection and treatment of neural impairment are the keys to preventing disabilities in leprosy. It opens with outlines of the topics investigated, followed by a review of the nature of the disease, its epidemiology, clinical features, diagnosis, immunology, classification of the various forms and finally an account of the pathology, methods of assessment and recording of neurological complications. One of the main purposes of the work was to determine the reliability and repeatability of simple but objective clinical tests that can be applied in the field or in areas where sophisticated equipment and services are not available. In this it succeeds.

This thorough study has two main parts, each with five chapters. The format of all but the last chapter, which is a general summary with discussion and conclusions, follow a set pattern. Initially a summary sets out aims, methods, results and conclusions. The following introduction, includes a detailed account of methods and rigorous statistical treatment of findings. The results are discussed, conclusions are drawn and each chapter has its own bibliography. If a second edition is required a detailed index and a single bibliography in alphabetical order would be most helpful.

The first part reports the results of retrospective studies on 536 patients registered at Green Pastures Hospital, Pokara, Nepal during four years. All were new patients, 396 were previously untreated and 140 were referred for treatment of reactions and/or neural impairment. Where slit skin smear services are not readily available, evidence indicated that a classification based on purely clinical criteria was a sensitive indicator of multibacillary leprosy, expediting early institution of multidrug therapy. The epidemiology of neuropathy, its risk factors, and response to steroid treatment and the early detection of the so-called silent neuropathy (as yet unnoticed by the patient), are covered in this section.

The second part of the book establishes:

1. Normal sensory thresholds for standardized monofilaments, moving two point discrimination, dot detection, tactile recognition of objects, discrimination of size and texture for the 99th percentile of 136 healthy Nepalese volunteers. Effects of age, sex, side, occupation, smoking and consumption of alcohol were examined with logistic regression.
2. Sensitive, simple and appropriate tests for effective early screening for neuropathy.
3. The intra and inter observer reliability of sensory testing.
4. The practical value gnostic sensibility (recognition of objects by touch) in leprotic neuropathy.

Pressure of work and other factors may make it impractical to map out areas of sensory loss, but arbitrary selection of isolated areas is not ideal with heterogeneous changes in nerve trunks. Contractures of muscles and joint capsules, major causes of disability, merit separate recording. These are minor criticisms of an admirable piece of clinical science based on experience, common sense and practical concern for the welfare of patients.

Ruth E. M. Bowden

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