Letter to the Editor

Five point skin testing for objective assessment of sensory impairment in leprosy

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Sensory impairment remains the cardinal clinical sign of leprosy, across it’s spectrum. However, demonstration of this vital sign depends on a number of factors. Among these, the most important are, the use of a proper technique and patients’ interpretation of pain. Of the different modalities of sensation, pain impairment occurs later than thermal sensory impairment. Demonstration of the latter is difficult in areas where leprosy is prevalent.

The subjective nature of testing for pain, considerably reduces its clinical accuracy. A positive result helps to differentiate leprosy from other similar skin conditions. However, since there is no objective measurement, this cannot be used for comparison or to assess improvement/deterioration on follow-up. This is specially so in clinical trials.

Therefore, we suggest testing for pain within the lesion, or the area supplied by the relevant sensory nerve in case of pure neural leprosy at five fixed points. The obtained results are expressed as a percentage. Whereas a ‘zero’ value indicates anaesthesia, a less than hundred indicates hypoaesthesia. This value can be used for comparison, subsequent follow-up and in objective assessment of peripheral nerve damage in clinical trials. As this is an extension of what is practiced today, this will be of immense value in objective assessment of peripheral nerve damage, the most significant aspect of leprosy, worldwide.

The test should be performed, using a sharp object on five points which will be chosen to represent the whole lesion or the sensory area of the affected nerve. Same points on the corresponding area will be checked simultaneously to improve accuracy. The test points will be noted using indelible ink on a piece of transparent plastic sheet. This will be used for subsequent assessments. The number so obtained (out of five) will be expressed as a percentage.