

**THERMAL SENSIBILITY TESTER. CAN IT BE USED TO FIND EARLY NERVE DAMAGE IN LEPROSY?**

Sir,

The newly-developed 'Thermal Sensibility Tester',<sup>1,2</sup> has been used for several studies in the diagnosis of leprosy with interesting results.

We discovered that it has not been clarified whether this Thermal Sensibility Tester was also designed for testing for early peripheral nerve damage (hand and foot) in leprosy patients. Some believe that this tester could be used in the follow-up of nerve damage.

In peripheral nerves unmyelinated C-fibres are supposedly also the earliest involved and therefore this belief would be an attractive concept.

We have recently performed a study concerning the sensory thresholds in the hand in leprosy patients and have tested a control group of 50 normal people with the Thermal Sensibility Tester.<sup>3</sup>

We used 2 testers and before testing made sure that the tester was working. We tested 5 points on each hand 3 times and gave a positive score if 2 out of 3 were felt.

This group was divided into 3 according to their profession; heavy, mixed and light work. Our findings are in Table 1.

**Table 1.** Thermal Sensibility Tester in 3 groups

Type of work	Positive score
Heavy work (farmers)	51.5
Mixed work	62.1
Light work (office, teachers)	76

The Thermal Sensibility Tester was not felt by almost half of the persons tested in the heavy work group (farmers). Even 24% of persons in light work were unable to feel the difference between the hot tip and the ambient temperature tip. All groups joined together indicate that one-third was unable to feel the difference between the 2 ends.

From these test results we can conclude that The Thermal Sensibility Tester can be used in the *diagnosis of early leprosy*, but does not seem to be appropriate for tests to find *early nerve damage* in leprosy.

We hope to submit the results of the other data of this study for publication soon.

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T SCHREUDERS  
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**References**

- <sup>1</sup> Srinivasan H, Stumpe B. Value of thermal sensibility testing in leprosy diagnosis in the field—field trial of a pocket device. *Lepr Rev*, 1989; **60**: 317–26.
- <sup>2</sup> Srinivasan H, Stumpe B. Leprosy diagnosis: a device for testing the thermal sensibility of skin in the field. *Bull WHO*, **67** (6): 635–41.
- <sup>3</sup> Protective Sensation Threshold in the Leprosy Hand. In preparation for publication.