

Neuropathy Screening Tool – NA03



Peripheral neuropathy is the prime pathogenic ingredient in the recipe for diabetic foot ulceration. Ulceration, in turn, is the key factor that may precipitate a cascade of events leading to lower-extremity amputation. Clearly, identifying the presence of neuropathy (or more pragmatically, clinically significant loss of protective sensation) and taking action before any breach in the epithelium is of enormous import in any screening and treatment program designed to prevent amputation. Several modalities have been advocated to assist in this endeavour. Current research promotes early detection of neuropathy so that secondary prevention measures, such as intensive foot-care education and treatment, can be used for individuals.

We have packaged three important simpler devices for the effective management of diabetic neuropathy and called the package as Neuropathy Assessment Kit. The kit consists of a TipTherm, a VibraTip and Monofilament 10gm(25 Nos).

TIP THERM® is an early diagnostic device for symmetrical polyneuropathy which measures temperature sensitivity of the skin. TIP THERM® was developed to give the clinician and patient a convenient and easy to use method of testing. This device is recommended to use under a room temperature of 23° C to 29° C

Failure to perceive variances in temperature in the extremities is the most decisive early symptom of distal symmetric polyneuropathy, a typical ailment accompanying diabetes mellitus (Ziegler 1988).

Portable Vibration sense device VIBRATIP™ is a device resembling a small key fob that provides a near-silent vibration of consistent amplitude at a frequency similar to that of a calibrated tuning fork. It is intended for use when testing a person's vibration perception during routine checks for diabetic peripheral neuropathy (DPN) in people who have type 1 or type 2 diabetes. It is a disposable device works for about 250 patients, vibrated at 125 Hz with intensity equivalent to that of a Biothesiometer at 25 Volts.

MF10GM: Monofilaments 10gm are an effective, convenient, easy to use, relatively inexpensive way of testing for loss of protective sensation in the feet in daily clinical practice. Usually for single patient use and can be used till 100 bends or filament damage.

References:

1. Semmes Weinstein Monofilaments: A simple effective and inexpensive screening device for identifying diabetic patients at risk of foot ulceration. Kumar S, Fernando DJS, Veves A, Knowles EA, Young MJ, Boulton AJM. Diabetes Research and Clinical Practice 1991; 13:63068
2. The use of the Semmes-Weinstein monofilament and other threshold tests for preventing foot ulceration and amputation in persons with diabetes. Mayfield JA, Sugarman JR J Fam Pract (United States), Nov 2000, 49(11 Suppl) pS17-29.
3. Early recognition of diabetic neuropathy: evaluation of a simple outpatient procedure using thermal perception; V Viswanathan, C Snehalatha, R Seena, A Ramachandran; *Postgrad Med J* 2002;78:541-542 doi:10.1136/pmj.78.923.541
4. TIP THERM®: A simple screening method for temperature sensation. R. Windecker, S. Kindermann an M. Spraul. Heinrich-Heine-University, Düsseldorf, Germany
5. Evaluation of thermal, pain and vibration sensation thresholds in newly diagnosed Type 1 diabetic patients. Ziegler et al. Journal of Neurology, Neurosurgery and Psychiatry 1988

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