

PP 5

Usefulness of Michigan Neuropathy Screening Instrument (MNSI) in diagnosis of diabetic neuropathy in a Sri Lankan diabetic clinic

Nisansala MWN¹, Wimalasekera SW¹

¹*Faculty of Medical Sciences, University of Sri Jayewardenepura*

Objectives: Diabetic sensory neuropathy is a common complication of diabetes mellitus causing considerable morbidity and disability. The objectives were to determine the proportion of diabetic neuropathy among the patients attending the diabetic clinic of the Colombo South Teaching Hospital and the use of Michigan Neuropathy Screening Instrument (MNSI) in screening for diabetic neuropathy.

Methods: A descriptive cross sectional study was done on 384 subjects diagnosed with having Type 2 diabetes mellitus (T2DM) attending the diabetic clinic of the Colombo South Teaching Hospital. An interviewer administered questionnaire assessed socio demographic data. MNSI, Diabetic Neuropathy Index (DNI) and Monofilament tests were used in the assessment of neuropathy. Diabetic neuropathy was confirmed by a positive score of two of the above three tests. Data analysis was done by using the SPSS 16 version software.

Results: 175(45.6%) of the subjects had diabetic neuropathy according to the diagnostic criteria. On study of clinic records only 16% of patients had been previously diagnosed with neuropathy. 165(43%) subjects of the neuropathy group were diagnosed positive for both MNSI and DNI. The MNSI score was positively correlated with the PPBS level of the diabetic subjects (correlation coefficient 0.235, $p=0.011$).

Conclusions: The data reveals a high frequency of diabetic neuropathy in this study. All diabetic patients should be screened for neuropathy annually in Sri Lanka as recommended by the American Diabetes Association. MNSI was confirmed as a useful, easily implementable tool to screen for neuropathy in diabetic clinics in Sri Lanka.