

Prevalence of Peripheral Neuropathy and its Impact on Activities of Daily Living in People with Diabetes Mellitus

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Objectives: The aim of this study is to determine the prevalence and impact of diabetic peripheral neuropathy and neurologic pain in patients with diabetes mellitus (DM).

Method: The study was a cross-sectional study that was conducted in the Palestine Diabetes Institute in Nablus, Palestine between July and December 2020, the data collection form was completed by interviewing patients and seeing their files. Patients were interviewed by using of the Michigan Neuropathy Screening Instrument (MNSI), which was designed to screen for the presence of diabetic neuropathy. SPSS program was used for data analysis.

Result: This study included 100 patients;. the average age (\pm SD) of patients was 48.5 ± 18.50 years, the majority 66% were married, 67% were females. Eighteen (18%) patients were smokers and 39% were from a city. Regarding employment status 22% were employed, 90% of patients had strong family history of DM, about educational level 40% were illiterate, 24% of patients had type 1 and 76% had type 2, about duration since diagnosis 61% were diagnosed since 5 years or less, 16% since 6-11 years and 21% since 11-20 years and 4% were diagnosed for more than 20 years, 54% of the patients were without co-morbidities and 43% with hypertension. About more than three fourths of the patients 76% were taking two anti-diabetic medications, (in 46% it was metformin 500mg 1*3 or 1*2), 39% of the patients had normal HbA1c, 38% had normal in FBG, 67% had normal in SrCr and 61% were normal in BUN. About sensation 35% of the study sample had legs and/or feet numb, 44% had some burning pain in legs and/or feet, 28% felt too sensitive to touch, 56% got muscle cramps in legs and/or feet, 44% had some prickling feelings in legs or feet, 38% were hurt when the bed covers touch skin, 95% were able to tell the hot water from the cold water when get into the tub or shower, 56% had an open sore on foot, 7% had been told that they had diabetic neuropathy, 33% felt weak all over most of the time, 42% felt symptoms worse at night, 94% legs hurt when walking, 71% were able to sense their feet when walking and no one had an amputation. According to the MNSI, 18% of the patients had neuropathy.

Conclusion: The prevalence of neuropathy among the patients is lower than that reported in other parts of the world, however, there is a room for improvement by patient education and better control of the disease to avoid complications.