

## **Is asymptomatic peripheral neuropathy present in Nigerian diabetic patients? An assessment using the United Kingdom Screening Test (UKST) and Bio-Thesiometry**

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### **Summary**

Diabetes mellitus (DM) is commonly complicated by peripheral neuropathy (PN). Symptoms suggestive of peripheral neuropathy (PN) in diabetes mellitus (DM) do not always indicate presence of underlying PN, while absence of symptoms does not rule out presence of underlying PN. To determine the prevalence of asymptomatic PN in diabetic patients using two methods – the United Kingdom Screening Test (UKST) and Bio-Thesiometry. 120 diabetic participants and a similar number of non-diabetic controls were screened for symptoms of PN using the UKST symptoms score and subsequently separated into two groups – those with symptoms of PN and those without. The “asymptomatic” cases and controls were further screened for underlying PN using the UKST signs score and Bio-Thesiometry. Among 120 diabetic participants, 37(30.8%) had no symptoms of PN (the asymptomatic cases) compared to 110 (91.7%) of the 120 non-diabetic controls (the asymptomatic controls). The UKST signs score detected PN more significantly among the cases than the controls (43.2% (16/37) vs 9.1% (10/110);  $\chi^2 = 22.5$ ,  $df = 1$ ,  $p < 0.01$ ). Similarly, Bio-thesiometry detected PN more significantly among the cases than the controls (29.7% (11/37) vs 9.1% (10/110);  $X^2 = 9.57$ ,  $df = 1$ ,  $p < 0.01$ ). Asymptomatic PN is present among Nigerian diabetic subjects and the absence of “alarm” symptoms of PN does not exclude the presence of genuine PN.

**Keywords:** *Diabetic mellitus, peripheral neuropathy, United Kingdom screening test, bio-thesiometry.*

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