

## Does the systematically introduction of the DN4 system, scoring painful diabetic peripheral neuropathy, improve the quality of care in a non-academic diabetic centre?

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**Introduction** Painful diabetic peripheral neuropathy (PDPN) is an underestimated and frequently forgotten complication of diabetes. Previous literature shows that PDPN occurs more frequently than expected. For those patients who are detected with PDPN, only 50% receives treatment, but only 25% gets treated in a proper way.<sup>1,2</sup> **Hypothesis and objectives** Our hypothesis: in a centre that already has a high alertness towards PDPN, we still expect a higher number of patients with positive signs of PDPN, if they undergo a systematically DN4 screening done by podiatrists instead of routine diabetes care. By doing this we wanted to ameliorate the treatment of those with PDPN. A one-year prospective observational study was installed to test the hypothesis in our outpatient clinic, including type 1 and type 2 diabetic patients and to look to feasibility for the podiatrists.

**Methodology** In a peripheral, non-academic, Belgian centre, 346 diabetic patients were screened for diabetes complications during an organized annually exam. All patients received cardiac checkup, ophthalmological examination, education by specialized nurse and dietitian and a podiatric screening. This screening included the following items: pulses, monofilament test, inspection of nails/skin, checking for orthopedic deformities, shoe inspection and oriented education. Since January 2012, VAS scale and DN4 scoring system were added. Two podiatrists were involved in this implementation program.

**Results** 346 diabetic patients (DP's) were screened. A positive DN4 /VAS score was found in 48 patients (19.87%). Mean age from these 48 patients was 68.35 (range of 49-91). Four cases were found in type 1 DP's and 44 cases in type 2 DP's. 21 patients (43.75%) were not previously diagnosed. 4 patients (3.33%) were misdiagnosed (chemotherapy /radiculopathy). Only 9 DP's (18.75%) were treated according to evidence based medicine.

**Conclusion** In our centre, with a high vigilance towards PDPN, we can state that there is still an important under-screening for this complication in daily clinical practice. The introduction of VAS/DN4 scoring system seems to add a positive value in the annual screening program and is advisable to implement in every annual diabetic foot screening. We particularly have to be focused on type 2 DP's. As can be learned from literature we need to make sure that patients with PDPN are detected at early onset and receive the proper treatment. The feasibility for us, podiatrists, was good and was felt as not time consuming.

### References

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