

# Screening for painful diabetic neuropathy

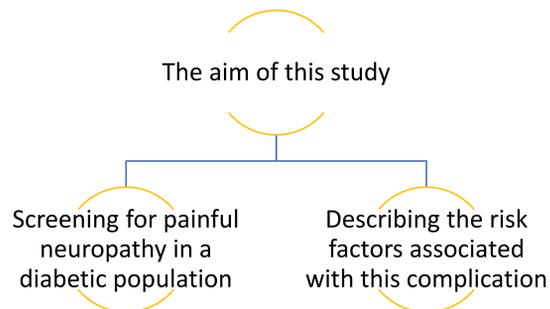
R. BS, H. GHADA, S. YASMINE, K. MOHAMED AMINE, D. MEHDI, Y. MOHAMED ALI

Pharmacy department, Principal Military Hospital of Instruction of Tunis

## INTRODUCTION

Painful diabetic neuropathy is a common complication of diabetes. It should be systematically sought by interrogation because patients do not spontaneously mention it. The diagnosis, which is essentially clinical, is based on a good analysis of the characteristics of neuropathic pain, which most often occurs at rest or at night, with the type of burn, electric discharge or painful cold sensation in the feet or legs (1).

## OBJECTIVES



## MATERIAL AND METHODS

Descriptive and analytical study conducted on diabetics who were hospitalized or consulted between June and August 2018 in the endocrinology department of our hospital.

Inclusion criteria: diabetics who are not diagnosed with neuropathy.

Non inclusion criteria : diabetics who are already on treatment for neuropathy.

We used the DN4 questionnaire. This questionnaire is divided into 4 questions representing 10 items to check. For each patient we count a score. If the score is greater than or equal to 4/10, the test is positive.

For patient information we used a pre-established record card.

The data was analyzed by SPSS software, v. 20. A value of  $p < 0.05$  was considered statistically significant

## RESULTS AND DISCUSSION

Our population consisted of 90 patients, 54% women and 46% men. It had an average age of  $54.3 \pm 15.35$  with extremes of 18 and 82 years and was predominantly composed of type 2 diabetics (88%) (Fig 1).

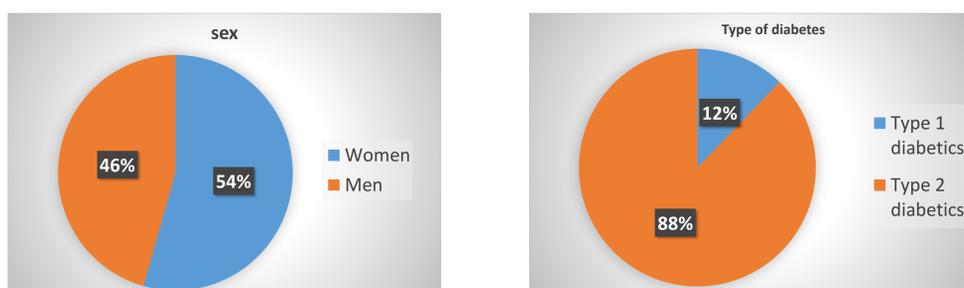


Fig 1: Description of the population

The age of diabetes was  $10.43 \pm 7.88$  years with a minimum of one year and a maximum of 32 years.

The average HbA1c was 9.2.26%, ranging from 5 to 16%. Only 28.9% of our patients had balanced diabetes (Fig 2).

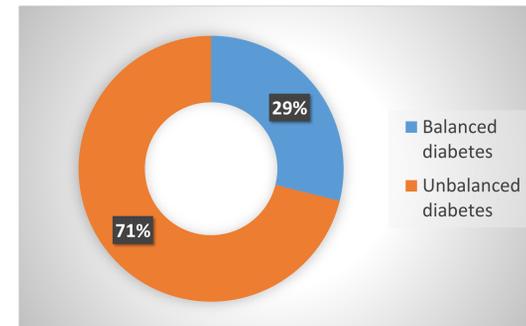


Fig 2: Distribution of patients by diabetes balance

Thirty patients were screened positive on the DN4 ( $\geq 4/10$ )

PDN was not associated with age ( $p = 0.412$ ), sex ( $p = 0.549$ ), type of diabetes ( $p = 0.111$ ), or age of diabetes ( $p = 0.187$ ).

PDN was associated with high blood pressure ( $p = 0.007$ ), insulin ( $p = 0.003$ ) and metformin ( $p = 0.022$ ) (Fig 3).

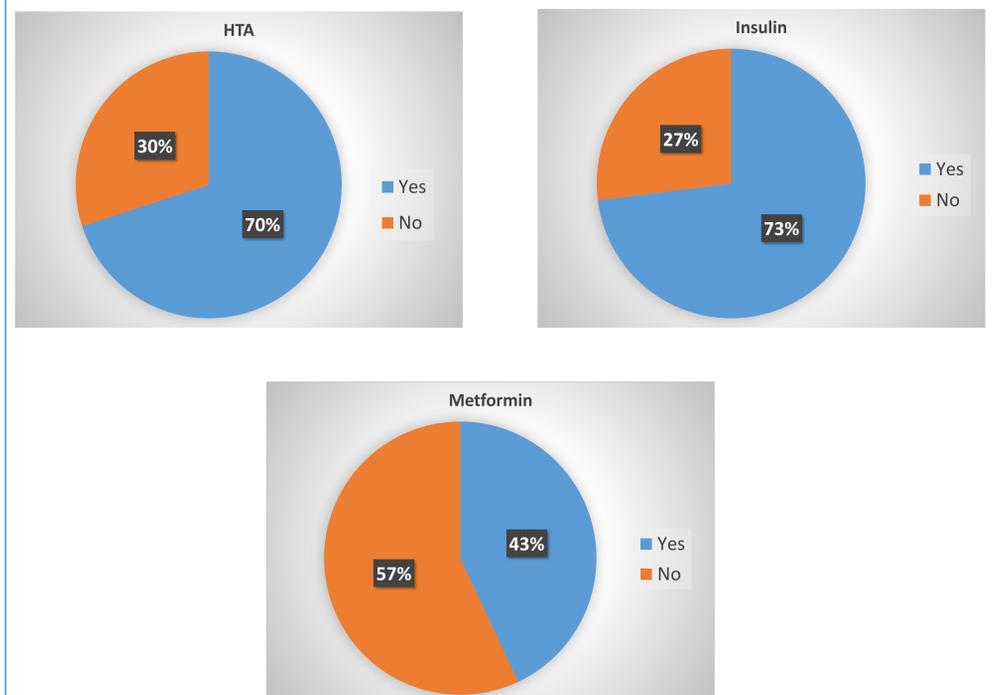


Fig 3: Link between PDN and some parameters

## CONCLUSION

The DN4 questionnaire is a simple tool that facilitates the recognition of painful diabetic neuropathy, which is a frequent and sometimes disabling complication of diabetes. There are some patient-related parameters that can influence the onset of this neuropathy.

## REFERENCES

1- Rita Zbadi, Nadia Anoun, Hanan El Ouahabi, Farida Ajdi. Dépistage de la neuropathie diabétique par le score « douleur neuropathique en quatre questions » Expérience du service de diabétologie du CHU Hassan II de Fès. Médecine thérapeutique. 2017;23(3):202-207. doi:10.1684/met.2017.0617



<http://www.eahp.eu/24-4CPS-207>