

Evaluation of risk factors for foot ulceration in a diabetic population attending outpatient podiatric clinics in Italy (APORPIDIA)

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Aporpidia is acronymus of Ambulatori podologici e rischio piede diabetico: = podiatric outpatient clinic and diabetic foot risk evaluation. This is a survey conducted by 30 podiatric outpatient clinics all over Italy to evaluate the risk of ulceration in the diabetic patients during one year of study. All the operators share the same protocol and methods of evaluation after a dedicated training. The risk evaluation has been performed using a questionnaire on history of foot diseases and evaluating the presence of Peripheral Neuropathy (PN) (VPT, monofilaments, DNI) , Peripheral Vascular Disease (PVD)(Ankle Brachial Index ABI and foot pulses), and Foot Deformities (FD). The patients were classified in a specific risk class according to a modified Texas Classification on risk.

During 1 year observation 1682 patients have been evaluated. They were distributed in the following risk classes: 0 (PN-,PVD-,FD±) = 576 (34.24%), 1a(PN+,PVD-, FD-) = 261 (15,52%), 1b (PN±,ABI<0.9,FD-) = 155 (9,22%), 2a(PN+, PVD-,FD+) = 402 (23.9%), 2b (PN±, ABI<0.5,FD±) = 61 (3.63), 3 (previous ulceration, amputation or charcot foot) = 227 (13.5%). There were 150 patients (10.1%) with previous ulceration, 35 (2.35%) with previous amputation, 10 (0,6%) with a charcot foot.

There was a strict correlation between the instrumental and clinical evaluation of PN as well as PVD in fact the ankle jerks (absent, present with reinforcement and present)were able to separate VPT values significantly different, respectively 18.8 ± 0.49 , 25.2 ± 0.82 , 28.04 ± 0.7 ($p<0.001$),and peripheral pulses (present, reduced and absent) were able to separate different ABI values respectively: 1 ± 0.06 , 0.96 ± 0.01 , 0.81 ± 0.02 ($p<0.001$).

In conclusion our epidemiologic survey show that diabetic patients attending outpatient podiatric clinics have chronic complications of diabetes in about 2/3 of cases, therefore it is important that the podiatrist will be aware of the risk class of each patient to adapt the therapeutic approach according to this information. It has been observed a good correlation between the clinical and instrumental evaluation of these chronic complications suggesting that the final evaluation of the patient is correct.

Podiatrists are able to evaluate the risk ulcer status of the diabetic patients and all the podiatrist should adopt an evaluation method to characterize the ulcer risk status of all the patients attending their outpatient podiatric clinics.