

Challenges in the Surgical Management of Patients with Diabetic Neuropathy

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Abstract

Background: Diabetes Mellitus represents a major socio-economic issue both by influencing the patient's quality of life and also considering the impact on the healthcare system. Diabetic neuropathy is one of the main complications associated, in most cases being present from the moment of diagnosis. Considering the high incidence of diabetes among patients with bilio-digestive surgical conditions, a thorough analysis of the evolution and management of these patients is necessary.

Materials and Methods: The association between the evolution of diabetic patients with bilio-digestive conditions and diabetic neuropathy as well as risk criteria and associated complications were analyzed in a descriptive, correlational study (314 patients) conducted in the Dr. I. Cantacuzino Clinical Hospital during 2020-2022. In the study, the patients were distributed into two groups, one consisting in patients without diabetes mellitus (control group) and the second further subdivided into two groups of study, first (2a) containing patients with type II with diabetic neuropathy and high and medium risk rate, and a second one (2b) including patients with diabetes mellitus type II with confirmed neuropathy and low risk rate. Clinical and laboratory evaluations were performed and management protocols applied.

Results: Statistically significant correlations were highlighted between diabetic neuropathy and the variables tested which were subsequently combined to achieve a risk score and a management protocol.

Conclusions: Diabetes mellitus associated with diabetic neuropathy represents a negative prognostic factor for the postoperative outcome being associated with high risk of morbidity and mortality. The risk score and the management protocol described as results of this study represent feasible solutions and a subservient instrument in preventing the occurrence of complications in patients with bilio-digestive surgical pathologies in order to improve the prognosis and survival of the patients.

Key words: diabetic neuropathy, surgical bilio-digestive pathology, postoperative management