

CONCLUSION

The study emphasizes that microvascular complications are already present even at mild glyceic dysregulation. This is the first study, done locally, that investigated presence of microvascular complications among patients with prediabetes. We recommend screening of patients with prediabetes especially those who are obese and have a history of smoking to avoid progression to blindness, irreversible kidney damage and amputation. Furthermore, education of patients especially those who are high risk is of utmost importance to decrease the burden of these microvascular complications.

KEY WORDS

prediabetes, microvascular complications

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PREVALENCE OF MICROVASCULAR COMPLICATIONS AMONG NEWLY-DIAGNOSED TYPE 2 DIABETES MELLITUS PATIENTS IN OSPITAL NG MAKATI OUTPATIENT DEPARTMENT

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INTRODUCTION

Type 2 diabetes mellitus is an insidious illness characterized by a preclinical asymptomatic period for many years during which the body is exposed to the injurious effects of hyperglycemia resulting to microvascular and macrovascular complications. These complications have grown as a worldwide burden particularly in developing countries and majority of which result to end stage renal disease, blindness, lower extremity amputations, premature cardiovascular disease, stroke and premature mortality. This study aims to determine the prevalence of microvascular complications namely retinopathy, nephropathy and neuropathy among newly diagnosed type 2 diabetes mellitus patients in Ospital ng Makati OPD and to determine the association between baseline HbA1c levels and occurrence of microvascular complications.

METHODOLOGY

This was a cross-sectional study. Sixty patients with newly diagnosed type 2 diabetes mellitus aged 18 years and above diagnosed within the past 3 months using the ADA criteria were included. Subjects were screened for nephropathy using urine microalbumin. Neuropathy was confirmed using 10-g monofilament and pinprick testing. Funduscopy was done to screen for retinopathy. Descriptive statistics were used to summarize the clinical characteristics of the patients. Frequency and proportion were used for nominal variables, median and range for ordinal variables, and mean and SD for interval/ratio variables. Odds ratio was calculated to determine the association between baseline HbA1c levels and microvascular complications.

RESULTS

Out of the 60 patients, 27 were males and 33 were females. The mean age was 53 years. Nephropathy was present in 40%, neuropathy in 23% and retinopathy in 13% of patients. Macrovascular complications were also present in the study population. Two (3%) had coronary artery disease based on the history of prior myocardial infarction and seven (11.67%) have had cerebrovascular disease. All patients with macrovascular complications had at least one microvascular complication. Subjects were classified on the basis of HbA1c levels. Although there was insufficient evidence to demonstrate an association between HbA1c levels and microvascular complications, it was noted that these complications are frequently seen in patients whose HbA1c levels were >7%.

CONCLUSION

Macrovascular complications are a major cause of mortality and morbidity among patients with diabetes. Our study has emphasized that microvascular and even macrovascular complications are already present at the time of diagnosis of type 2 diabetes mellitus. A high prevalence of microvascular complications at the time of diagnosis necessitates that evaluation from these must be done on all patients for screening and management for possible reversibility and to delay its progression.

KEY WORDS

diabetes mellitus, microvascular complications, nephropathy, retinopathy, neuropathy