

Current clinical status and vascular complications among patients with type 2 diabetes mellitus at tertiary hospitals in Malaysia

Abstract

Objective: To assess the prevalence of diabetic vascular complications and cardiovascular risk factors control in type 2 diabetic patients at tertiary settings. **Methods:** This cross-sectional study was conducted among 313 patients diagnosed with type 2 diabetes mellitus (T2DM) at two tertiary referral hospitals in Malaysia. Data regarding socio-demographics, macro- and microvascular complications, family health history, blood pressure, anthropometric indices, glycaemic control, and lipid profile were obtained from medical records, face-to-face interview and physical examination. **Results:** The mean age of patients was 55.7 ± 9.2 years, mean diabetes duration was 10.1 ± 8.1 years, and 52.1% were females. Approximately 36.1% patients had cardiovascular disease (CVD). There were high prevalence of established coronary artery disease (30.7%), cerebrovascular disease (10.2%), and peripheral vascular disease (5.1%). Peripheral neuropathy, diabetic nephropathy and retinopathy were present in 41.5%, 17.6% and 15.0% patients respectively. Only 14.1% of the patients reached optimal HbA1c level and 21.1% patients achieved target fasting plasma glucose. The overall prevalence of dyslipidemia was 89.1%, hypertension was 80.2%, and obesity was 35.9% (BMI) and 86.5% (waist-to-hip ratio). **Conclusions:** Diabetic vascular complications were highly prevalent among the type 2 diabetic patients. Cardiovascular risk factors control was suboptimal. Both awareness and application of recommended guidelines need to be reinforced.

Keyword: Diabetic vascular complications; Cardiovascular disease; Neuropathy; Nephropathy; Retinopathy; Cardiovascular risk factors; Type 2 diabetes mellitus; Tertiary referral hospitals