PP-D-25

CAROTID ATHEROSCLEROSIS ACCORDING TO THIGH AND WAIST CIRCUMFERENCE IN PREDIABETIC PATIENTS

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Chul Sik Kim, Seol A Jang, Kyoung Min Kim, Seok Won Park
Yongin Severance Hospital, Yongin-si, Korea

INTRODUCTION
Patients with diabetes are at a higher risk for cardiovascular diseases. Even patients with prediabetes have increased cardiovascular risk, and preventive measures are necessary. It is known that the thinner the thighs and the larger the waist circumference, the higher the risk of cardiovascular disease. Several studies have shown that thigh and waist circumference are associated with atherosclerosis in diabetic patients.

METHODOLOGY
This study investigated the relationship of thigh and waist circumference with carotid atherosclerosis in patients with prediabetes. This observational study included 337 Korean subjects with prediabetes, in whom anthropometric measurements and carotid ultrasonography were conducted. Carotid plaque was defined as focal structures encroaching the arterial lumen by ≥0.5 mm or 50% of the surrounding intima-media thickness (IMT) value or a thickness ≥1.5 mm.

RESULTS
As a result of the analysis, there was no relationship between carotid atherosclerosis and thigh and waist circumference in both men and women with prediabetes.

CONCLUSION
Results suggest that the relationship between cardiovascular risk and body type measured by thigh and waist circumference is unclear and may vary depending on glycemic status. However, further longitudinal studies are warranted.

KEYWORDS
carotid atherosclerosis, thigh circumference, waist circumference, prediabetes

PP-D-26

DEMOGRAPHIC PROFILE, GLYCEMIC CONTROL AND TREATMENT PATTERNS OF TYPE 1 DIABETES PATIENTS IN CENTRAL PAHANG

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See Chee Keong, Nurbadriah Jasmiad, Ilham Ismail
Hospital Sultan Haji Ahmad Shah, Temerloh, Pahang, Malaysia

INTRODUCTION
The burden of Type 1 diabetes (T1D) care in adulthood is often overshadowed by the increasing Type 2 diabetes prevalence. In addition to the complexity of transitional care from adolescence to adulthood, there are multiple barriers to the care of these patients. Identifying these barriers is crucial to facilitate creating personalized and focused care for T1D patients.

METHODOLOGY
This was a cross-sectional study recruiting all T1D patients who consulted in endocrinologist-led diabetes clinics in secondary and tertiary hospitals in Central Pahang, Malaysia. This included coverage areas of Bentong, Temerloh, Bera, Jengka, and Jerantut in Pahang. The study aimed to determine the demographic data, glycemic control, diabetes complications, and treatment patterns in T1D patients. Patient's electronic medical records were retrieved for data collection.

RESULTS
Fifty-eight patients were recruited into the study, with female predominance (63.8%), and the majority were of Malay ethnicity (67.2%). The mean age of the patients was 25.26, (SD = 7.5) with a mean age at diagnosis of 16.98 (SD = 6.9). The majority had a duration of illness of 7 years. Almost 66% of patients had prior testing for autoantibodies and c-peptide as diagnostic confirmation. Fifty percent of patients had childhood-onset diabetes, presenting early with diabetic ketoacidosis. For diabetes complications, 24.1% of patients had nephropathy, while 12.1% had diabetic retinopathy. Up to 10.3% had documented hypoglycemia, and 8.6% had DKA in the past six months. Despite poor glycemic control, there was still a statistically significant reduction of HbA1c from baseline compared to the latest follow-up (10.93% vs 9.92%, p <0.01). Only 32.1% of patients at the latest follow-up had HbA1c less than 8.5%. The mean total daily insulin usage was 0.84 SD 0.3 u/kg/day. Only 17.2% of T1D patients had prior exposure to continuous glucose monitoring utilization.

CONCLUSION

Enrolment in a specialized T1D clinic is important to deliver an appropriate and targeted approach to T1D patients. The poor control of T1D patients in this cohort reflects the barriers to care including treatment access, adequacy of glucose monitoring, disease understanding and peer and family support. Technology-based intervention in T1D patients is still underutilized and concerted effort to incorporate technology into treatment needs to be intensified.

KEYWORDS

type 1 diabetes, demographic, glycemic control

PP-D-27

TREATMENT ADHERENCE TO GUIDELINE EVALUATION IN T2D (TARGET-T2D) MALAYSIA: IMPACT OF SGLT-2I USE AMONG PATIENTS WITH T2DM ATTENDING TERTIARY CARE

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Rohana Abdul Ghani,[1] Nurain Mohd Noor,[2] Zanariah Hussein,[2] Anis Syazwani Abdul Raof,[3] Lee-Ling Lim,[3,4] Norlaila Mustafa,[5] Wan Mohd Wan Bebakar,[6] Syahrizan Samsuddin,[7] Mohd Badrulhisham Long Bidin,[8] Sy-Liang Yong,[9] Siew-Hui Foo,[10] Thiam-Kian Chiew,[11] Siew Pheng Chan[3]

[1]Universiti Teknologi MARA UiTM, Selangor, Malaysia
[2]Hospital Putrajaya, Putrajaya, Malaysia
[3]University Malaya Medical Centre, Kuala Lumpur, Malaysia
[4]Chinese University of Hong Kong, Prince of Wales Hospital, Hong Kong SAR
[5]Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia
[6]Hospital Universiti Sains Malaysia, Kelantan, Malaysia
[7]Hospital Sedang, Selangor, Malaysia
[8]Hospital Kuala Lumpur, Kuala Lumpur, Malaysia
[9]Hospital Klang, Selangor, Malaysia
[10]Hospital Selayang, Kuala Lumpur, Malaysia
[11]University of Malaya, Kuala Lumpur, Malaysia

INTRODUCTION

Sodium-glucose cotransporter 2 (SGLT2) inhibitors have significant cardiovascular benefits, particularly in heart failure and chronic kidney disease.[1,2] However, its use has been limited by its side effects and health system resources.[3,4] Thus, TARGET-T2D was initiated to study the use of SGLT2i within our population to highlight the treatment gap between SGLT2i and non-SGLT2i users. We identified the differences between patients who received SGLT-2i and those who did not to highlight the importance of optimizing treatment in those who would benefit from the cardio- and renoprotective effects of SGLT2i.

METHODOLOGY

Cross-sectional data were collected at eight publicly-funded tertiary hospitals in the Greater Kuala Lumpur region from December 2021 to June 2022). Patients aged ≥18 years with T2D treated with oral glucose-lowering drugs and/or injectable therapy who had two or more outpatient visits within the preceding year were eligible. Various demographic, anthropometric, and metabolic data were included for data analysis. Analyses were stratified by prior atherosclerotic cardiovascular disease (ASCVD) and clinic type (Diabetes specialist versus General medicine clinics).

RESULTS

Four thousand seven hundred three patients were recruited, of which 38% received SGLT2Is (n = 1803). Almost all of them attended the Endocrine Subspecialty clinic, whilst only 10% of the population received their prescriptions from the General Medical Clinic. Those who received SGLT2I were significantly younger (mean age 58.8 ± 11.6 vs 60.8 ± 12.9, p <0.001) with earlier onset of T2DM. They had greater metabolic risks including longer duration of T2DM, higher HbA1c, larger BMI and WC, with higher proportions of patients who had underlying atherosclerotic cardiovascular disease (ASCVD)(35.4% vs 30.1%, p = 0.01) and HHF 4.8% vs 3.5%, p <0.01). In addition, those who received SGLT2i demonstrated lower systolic and diastolic blood pressures and slightly better lipid profiles. However, there were lower proportions of patients who had eGFR <60 mL/min/1.73 m^2 (25.8% vs 35.7%, p <0.001) and significant proteinuria with urinary albumin creatinine ratio (UACR) >3 mg/mmol (59.5% vs 63.8%, p = 0.021), among those who received SGLT2i versus the comparator group. Concerning treatment targets, attainment of individual and composite glycaemic, blood pressure, and lipid targets were significantly observed within the SGLT2I group versus the non-SGLT2i group. Multiple logistic regression models demonstrated that Endocrine clinic follow-ups, eGFR >45 mL/min/1.73 m^2, presence of ASCVD, and HHF are independent predictors for the use of SGLT2i within the study cohort.

CONCLUSION

Those who received SGLT2Is attended Endocrine Clinics and had the indications for its use including very high CV risks. However, a third of patients who did not receive the medication had the indications for it including the presence of ASCVD, eGFR <60 mL/min/1.73 m^2 and significant proteinuria with urinary ACR >3 mg/mmol. This underscores the importance of including SGLT2i in the treatment regime for patients with T2DM.

KEYWORDS

SGLT2 inhibitor, cardiovascular diseases, type 2 diabetes mellitus