

## PP-D-25

### CAROTID ATHEROSCLEROSIS ACCORDING TO THIGH AND WAIST CIRCUMFERENCE IN PREDIABETIC PATIENTS

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#### 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  $\geq 0.5$  mm or 50% of the surrounding intima-media thickness (IMT) value or a thickness  $\geq 1.5$  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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#### 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.