DIABETES

PP-D-01

DIABETIC KETOACIDOSIS COMPLICATED BY DEEP VEIN THROMBOSIS IN A NEWLY DIAGNOSED PATIENT WITH TYPE 1 DIABETES MELLITUS WITH UNDIAGNOSED MAY-THURNER SYNDROME

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CASE
May-Thurner syndrome is a rare vascular condition where the left common iliac vein is compressed by the right common iliac artery, leading to left iliac vein thrombosis. Here, we present a case of diabetic ketoacidosis (DKA) complicated by deep vein thrombosis (DVT) in a patient with type 1 diabetes mellitus with May-Thurner syndrome.

A 41-year-old Thai male with T1D and a recent COVID-19 infection presented with polyuria and significant weight loss. He discontinued insulin treatment for a month and was diagnosed with DKA. Shortly after admission, he developed left lower limb swelling with elevated D-dimer levels. Doppler ultrasound revealed acute DVT in the left common iliac vein with a collateral blood flow, prompting suspicion of extrinsic venous compression including May-Thurner syndrome, later confirmed by CT venography. The follow-up endovascular treatment was planned.

In patients with DKA with lower extremity DVT, consider May-Thurner syndrome as a potential cause alongside the known hypercoagulable state.

KEYWORDS
deep vein thrombosis, COVID-19, type 1 diabetes, diabetic ketoacidosis, May-Thurner syndrome

PP-D-02

GLYCEMIC CONTROL IN CONTINGENT SITUATIONS: A LOOK INTO THE HbA1c OF PERSONS WITH DIABETES MELLITUS DURING THE COVID-19 PANDEMIC IN METRO MANILA

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INTRODUCTION
Coronavirus Disease-2019 (COVID-19) was declared by the World Health Organization as a pandemic last March 11, 2020. Different governments enforced different measures like imposition of lockdowns to control the spread of the disease. However, lockdowns have adverse effects. This study aimed to determine the effect of quarantine restrictions caused by the COVID-19 pandemic on the glycemic control of adult patients with type 2 diabetes mellitus at the East Avenue Medical Center. It also aimed to identify socioeconomic and lifestyle changes that affected glycemic control during the lockdown.

METHODOLOGY
This study compared glycemic control of people with type 2 diabetes mellitus pre- and post-imposition of community quarantine during the COVID-19 pandemic. This study analyzed factor/s that affected glycemic control in such a contingent situation. It is a cross-sectional analytic study that examined HbA1c as a measure of glycemic control. Specifically, it compared HbA1c taken from patients with type 2 diabetes mellitus before the Enhanced Community Quarantine in Metro Manila and compared it with HbA1c taken post-ECQ/MECQ. It also identified other factor/s that affected glycemic control present in a lockdown.

RESULTS
A total of 120 patients with type 2 diabetes mellitus participated in the study. The median HbA1c prior to ECQ was 8.0 while the median HbA1c post-ECQ/MECQ was 8.23. Median fasting blood sugar was 144.88 mg/dl prior to quarantine which increased to 158.05 mg/dl after ECQ/MECQ.

CONCLUSION

Increases in the median HbA1c and FBS were noted among the patients; however, only the increase in FBS was statistically significant. There was also a statistically significant lesser risk of having poor glycemic control when patients adhered to medications. Efforts toward addressing different factors in contingent times like these should be made. This study can serve as an example for future contingent situations (e.g., natural disasters or war).

KEYWORDS

diabetes, COVID-19, glycemic control

PP-D-03

ANTHROPOMETRIC, BIOCHEMICAL AND IMAGING CHARACTERISTICS OF FEMALES WITH DIABETES AND FAMILIAL PARTIAL LIPODYSTROPHY

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INTRODUCTION

Familial partial lipodystrophy (FPL) is an under-recognized condition characterized by an increased genetic predisposition to abnormalities in white adipose tissue function, quantity, and distribution, leading to young-onset metabolic syndrome including type 2 diabetes mellitus (T2DM). However, in clinical practice, there are no clear criteria to diagnose FPL. This pilot study aimed to determine clinical markers using skinfold measurements, DXA, and MRI scans to identify individuals with FPL and to characterize their adipose tissue distribution and fat phenotypes.

METHODOLOGY

In 8 females with FPL and 4 BMI-matched female controls, skinfold measurements, HOMA-IR, whole genome sequencing, and DXA were performed. MRI was used to measure abdominal subcutaneous adipose tissue (SAT), visceral adipose tissue (VAT), and femoral and calf SAT and muscle volumes.

RESULTS

Both groups' median BMI were 32-33 kg/m^2. All eight patients in the FPL group had T2DM with median disease onset at age 31 years. FPL, when compared to controls, had higher levels of HOMA-IR (p = 0.028), reduced thigh skinfold thickness (20.4 mm vs 51.4 mm, p = 0.008) with a correspondingly increased subscapular-to-thigh skinfold ratio (p = 0.004), and iliac-to-thigh skinfold ratio (p = 0.004). The FPL group had a reduced leg fat percentage (34.6 vs 48.1, p = 0.004) with an increased ratio of trunk-to-legs fat percentage (1.36 vs 0.98, p = 0.004), and android to gynoid ratio (1.21 vs 0.98, p = 0.008). The FPL group had decreased SAT volume in the femoral and calf.

KEYWORDS

lipodystrophy, severe insulin resistance, MRI, diabetes, obesity

PP-D-04

THE ABC TARGETS AND USE OF ORGAN-PROTECTIVE MEDICATIONS AMONG THAI PEOPLE WITH YOUNG-ONSET TYPE 2 DIABETES

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INTRODUCTION

Young-onset Type 2 Diabetes (YOD) is associated with premature death and worse microvascular and cardiovascular outcomes. Our recent study which recruited all individuals with the onset of DM before 30 years revealed that YOD had a three times higher prevalence of diabetic kidney disease (DKD) than young-onset T1D despite similar disease duration, glycemic control, and age. This study aimed to evaluate the rate of RAAS blockade (ACEi or ARB), SGLT2i, GLP-1 RA, and statin use among YOD. The proportion of patients who attained various multiple treatment targets was also evaluated.

METHODOLOGY

Data from all participants with T2D enrolled between 2022-2023 into the Thai Type 1 Diabetes and Diabetes Diagnosed Before Age 30 Years Registry, Care and Network (T1DDAR CN) from Theptarin Hospital, a tertiary diabetes center in Bangkok, were analyzed. The various ABC targets defined as standard targets (A1C <7.0%, BP <140/90 mmHg, and LDL <100 mg/dL), ADA-recommended targets (A1C <7.0%, BP <130/80 mmHg, and LDL <100 mg/dL) and tight targets (A1C ≤6.5%, BP <130/80 mmHg, and LDL <70 mg/dL) were examined.