CONCLUSION

Significant weight reduction was observed at 1 year, similar to other studies. Most patients reported the greatest weight loss during the first three months, possibly due to the diuretic effect of SGLT2i. Though HbA1c did not show a significant reduction in our cohort, the insulin TDD was slightly lower at 12 months, which may translate to a long-term reduction in healthcare costs. Limitations include fewer patients on dapagliflozin as this medication was only recently available in our facilities. Future studies should include a follow-up period with data on cardiovascular and renal outcomes.

EP_A057

NEVER TOO OLD FOR AUTOIMMUNE DIABETES: A CASE REPORT OF LADA DIAGNOSED IN AN ELDERLY PATIENT

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INTRODUCTION/BACKGROUND

Latent autoimmune diabetes of adults (LADA) is characterized by slow, progressive immune-mediated destruction of pancreatic islet cells, accounting for 2-12% of diabetes in adults. It is diagnosed in individuals more than 30 years old with positive diabetes-autoantibody. Diagnosis can be challenging and sometimes delayed as these patients fit neither type 1 nor type 2 diabetes phenotypes.

CASE

We report a case of late diagnosis of LADA in a 70-year-old male who was presumed to have type 2 diabetes mellitus (T2DM) and initially presented with multiple episodes of diabetic ketoacidosis (DKA) four years ago.

A 70-year-old Chinese male was diagnosed with T2DM 4 years ago and was started on treatment with metformin, vildagliptin and premixed human insulin. Despite good compliance with treatment, HbA1c remained very high (10-12%). He did not have a history of DKA, had no family history of autoimmune disease, no previous COVID infection. He was lean with a BMI of 17 kg/m^2 and there were no features of insulin resistance.

He presented to the hospital with severe DKA (blood sugar 26.8 mmol/L, pH 7.003, HCO3 5 mmol, ketone 7 mmol/L), attributed to atypical pneumonia. He responded to antibiotics and insulin with dextrose infusion and was subsequently discharged well with oral antidiabetic medications and basal insulin. However, after seven days, he was admitted again for severe DKA and was given intravenous steroids for adrenal insufficiency (AI). Subsequent cosyntropin tests ruled out AI. Diabetes autoantibody was requested and came back positive for anti-GAD, anti-ICA and anti-IA2. Treatment was shifted to basal-bolus insulin, resulting in improved HbA1c and no recurrence of DKA.

CONCLUSION

Diagnosis of LADA can be challenging. However, features of insulinopaenia such as DKA and the absence of clinical features of insulin resistance should raise clinical suspicion regardless of the patient's age of presentation.

EP_A058

TIME TO DISCONTINUATION OF SGLT2 INHIBITORS AMONG ADULTS WITH TYPE 2 DIABETES AT UNIVERSITI MALAYA MEDICAL CENTRE

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INTRODUCTION

Sodium-glucose cotransporter-2 inhibitors (SGLT2i) have emerged as a new guideline-directed medical therapy (GDMT) for managing cardiovascular-kidney-metabolic (CKM) syndrome. Understanding the pattern of SGLT2i discontinuation can help prevent unwarranted discontinuation of this GDMT and simultaneously develop interventions to mitigate its possible adverse sequelae. We aimed to evaluate the time to discontinuation of SGLT2i based on patient-, clinical- and medication-related factors among adults with type 2 diabetes (T2D) at the Universiti Malaya Medical Centre, Kuala Lumpur, Malaysia.

METHODOLOGY

We conducted a retrospective cohort study involving adults aged 18 years and above with T2D who were initiated with SGLT2i between January 2016 and December 2021. We used the Kaplan-Meier curves with log-rank tests to estimate the median time to SGLT2i discontinuation.

RESULTS
A total of 602 adults with T2D were analysed. The overall median time to SGLT2i discontinuation was 40.5 months (95%CI [34.6, 54.0]). Adults with T2D who were on empagliflozin (vs. dapagliflozin; $P = 0.041$) and concomitant DPP4 inhibitors ($P = 0.028$) had significantly longer treatment persistence. Additionally, adults with baseline eGFR <60 ml/min/1.73 m^2 discontinued SGLT2i earlier than those with baseline eGFR ≥60 ml/min/1.73 m^2 ($p = 0.002$). The overall treatment persistence rates at 6 months, 1 year, 3 years and 5 years were 78.0%, 68.2%, 49.4% and 42.6%, respectively. The top 3 reasons for SGLT2i discontinuation were as follows: 1) high pill burden and nonadherence (15.8%); 2) a decline in eGFR and acute kidney injury (10.3%); and 3) financial constraints (8.4%).

CONCLUSION
This study provides valuable insights into the time to SGLT2i discontinuation in adults with T2D at an urban academic institution. As SGLT2i are the GDMT for CKM syndrome, the underlying factors behind unwarranted SGLT2i discontinuation should be explored to facilitate more personalized diabetes management to optimize health outcomes.

EP_A059

THE IMPACT OF LIFESTYLE MODIFICATION ON METABOLIC SYNDROME AMONG MOH STAFF

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INTRODUCTION/BACKGROUND
Metabolic syndrome (MetS) represents a pressing global public health concern, marked by a constellation of metabolic irregularities such as elevated blood pressure, dyslipidaemia, elevated fasting blood glucose and central obesity, heightening the risk for type 2 diabetes mellitus and cardiovascular disease. Despite evidence endorsing lifestyle interventions, local data on their effectiveness in Malaysia are scarce.

METHODOLOGY
This study explores the impact of lifestyle modifications on MetS among Ministry of Health (MOH) staff at Hospital Shah Alam (HSAS) to guide policy-level interventions for improved public health outcomes. Using data from KOSPEN 2020 at HSAS, this cohort study focused on lifestyle modifications from July 2021 to July 2022, comprising four arms: the diet group, exercise group, exercise + diet group, and control group. Due to challenges with recruitment and adherence, the sample size was limited, and the follow-up period was abbreviated.

RESULTS
With 36 participants recruited (30.6% males, 69.4% females; mean age: 40.28 years), no significant differences in key parameters were noted at 3 and 6 months. However, during the 9-month reassessment, the diet group demonstrated a significant mean reduction in SBP ($P = 0.005$). On the other hand, the diet + exercise group exhibited decreased FBS compared to the diet ($P = 0.037$) and control groups ($P < 0.001$).

CONCLUSION
Despite constrained statistical significance likely attributed to high dropout rates and adherence issues, dietary control, exercise, or their combination indicate efficacy in managing MetS. Further methodically structured research is imperative to deepen our comprehension of these relationships.

EP_A060

EAST COAST ENDOCRINE TERTIARY CENTRE EXPERIENCE WITH GLUCAGON-LIKE PEPTIDE-1 (GLP-1) RECEPTOR AGONISTS

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INTRODUCTION/BACKGROUND
GLP1-RA is licensed for the treatment of Type 2 Diabetes Mellitus (DM) and weight reduction in obese patients. These agents have been proven effective without increased risk of hypoglycaemia and with significant weight reduction benefits.

METHODOLOGY
This retrospective cohort study aims to determine the clinical outcome of Type 2 DM and obese patients started on