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disease. Within this cohort, 66.2% had CKD with a mean eGFR of 61.4 ± 30.5 mL/min/1.73 m² and a median uACR of 30.8 (6.05 – 111.3) mg/mmol. 19.4% had heart failure, 16.2% had retinopathy, and 3.5% had peripheral neuropathy. A large proportion of patients were on insulin (71.1%), and GDMT uptake were as follows: SGLT2- inhibitors (90.1%), GLP1-RA (28.1%), RAAS-blockade (88.0%), and statins (93.0%).

CONCLUSION

The pilot Malaysian CaReMe clinics adopt a holistic, patient-centred implementation of integrated care to address gaps and improve outcomes in T2D. These virtual multi-disciplinary clinics can easily be implemented within resource-limited settings.

EP_A202

GLYCAEMIC OUTCOMES FOLLOWING INSULIN DE-INTENSIFICATION IN PATIENTS WITH TYPE 2 DIABETES MELLITUS: A RETROSPECTIVE OBSERVATIONAL STUDY IN A MALAYSIAN TERTIARY CENTRE

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INTRODUCTION

Insulin deintensification is the reduction, simplification, or cessation of insulin therapy. Despite its potential benefits, there is limited local data on real-world insulin deintensification practices. We investigated the impact of insulin deintensification on glycemic control among patients with type 2 diabetes mellitus (T2DM) attending outpatient follow-up at a Malaysian tertiary hospital.

METHODOLOGY

We conducted a retrospective observational study at the outpatient clinic of Hospital Sungai Buloh from January to December 2024. Adults with T2DM who underwent insulin deintensification were included. Patients with type 1 diabetes, gestational diabetes, or incomplete follow-up data were excluded. Primary outcomes were changes in HbA1c and pre-breakfast blood glucose (BG) levels. Secondary outcomes examined associations between diabetes duration and baseline HbA1c with glycemic outcomes. Paired t-tests and correlation coefficient tests were used for statistical analyses.

RESULT

A total of 33 patients were included. Most (n = 22) were initially on a basal-bolus regimen and subsequently de-intensified to premixed human insulin (n = 12), premixed analogue insulin (n = 7), oral agents (n = 2), or basal-only insulin (n = 1).

Among nine patients initially on human premixed insulin, five were switched to a premixed analogue regimen, two to oral agents, one to basal-only insulin, and one to basal analogue. Of the two patients on basal insulin, one transitioned to oral agents and the other to a premixed analogue regimen.

Nineteen patients had complete paired HbA1c data, with mean HbA1c improving from 10.36% (SD 2.70) to 8.93% (SD 2.49) (mean change -1.43%, $p = 0.003$).

Fifteen patients had complete pre-breakfast BG data, showing a mean reduction from 12.07 mmol/L (SD 3.86) to 9.90 mmol/L (SD 3.22) ($p = 0.037$).

Baseline HbA1c strongly correlated with follow-up HbA1c ($r = 0.76$, $p < 0.001$). Meanwhile, diabetes duration showed no significant association ($r = -0.24$, $p = 0.365$).

CONCLUSION

Insulin deintensification was associated with significant improvements in HbA1c and pre-breakfast BG levels, supporting its safe implementation in selected patients with T2DM. Baseline HbA1c was a strong predictor of post-intervention control. These findings highlight the potential for regimen simplification with structured follow-up and monitoring.

EP_A203

AN AUDIT OF CONTINUOUS GLUCOSE MONITORING ON GLYCAEMIC CONTROL AND METABOLIC PROFILES OF PATIENTS WITH TYPE 1 DIABETES MELLITUS AT A TERTIARY CENTRE

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INTRODUCTION

Type 1 Diabetes Mellitus (T1DM) is a chronic autoimmune disorder that results in absolute insulin deficiency and an elevated risk of both microvascular and macrovascular complications. Achieving optimal glycemic control is essential for preventing these complications. Continuous

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Glucose Monitoring (CGM) has been demonstrated to enhance glycemic control compared to conventional self-monitoring of blood glucose (SMBG). This audit aims to assess glycemic control and metabolic profiles among patients with T1DM at the Endocrine Institute, Putrajaya Hospital, comparing those using CGM with those relying on SMBG to determine whether CGM leads to improved metabolic outcomes.

METHODOLOGY

A retrospective cross-sectional study was conducted at the Endocrine Institute, Putrajaya Hospital. Electronic medical records of patients who attended the T1DM clinic between April 1, 2024, and March 31, 2025, were reviewed. Descriptive and statistical analyses of glycaemic control and metabolic profiles between CGM users and those using SMBG were performed using SPSS version 25.

RESULT

A total of 150 patients were included in the study. Overall, the population exhibited poor glycemic control and metabolic profiles, with a mean HbA1c of 9.0%. Additionally, 55% of the patients were overweight or obese. Seventy-one percent had elevated LDL-c levels (>2.6 mmol/L), with a mean LDL-c of 3.2 mmol/L. Of the patients, 24.7% used CGM for glycemic monitoring and had a significantly lower HbA1c (-1.2%) than the SMBG group. The study also demonstrated a significant reduction in HbA1c (-0.8%) after switching to CGM for monitoring. However, no significant differences were observed in BMI or LDL-c levels between the CGM and SMBG groups.

CONCLUSION

This study showed that the use of CGM contributed to better glycemic control in patients with T1DM. However, achieving optimal glycemic control alone is insufficient for effective weight management and improving lipid profiles. Therefore, lifestyle interventions, weight management strategies, and pharmacological treatments for lipid reduction are also necessary.

EP_A204

EFFECTIVENESS AND PERSISTENCE OF GLP-1 RECEPTOR AGONIST TREATMENT AMONG PEOPLE WITH TYPE 2 DIABETES

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INTRODUCTION

People with diabetes (PwD) have increased morbidity, mortality, and healthcare costs. Glucagon-like Peptide-1 Receptor Agonists (GLP-1RA) have revolutionized diabetes management by optimizing weight and glycemic control while providing cardiorenal protection. This study is designed to evaluate the effectiveness of GLP-1RA and identify predictors of treatment persistence among PwD.

METHODOLOGY

This retrospective cohort study at the Universiti Malaya Medical Centre included adult PwD prescribed with GLP-1RA between 2018-2023, excluding those with malignancy or post-bariatric surgery. Data on demographics, anthropometrics, comorbidities, biochemistry, and adverse events were extracted from electronic health records from the initiation of GLP-1RA until the last visit before December 31, 2023. A prescription refill gap of <90 days was classified as the persistent group (PG), while the remainder were categorised as the non-persistent Group (NPG). Generalised Linear Model (GLM) was used to determine factors associated with treatment persistence.

RESULT

Among 470 PwD analysed, the mean age was 59.1 ± 13.0 years, and 54.3% were female with a baseline BMI of 32.3 ± 6.6 kg/m². 91% remained persistent with GLP-1RA. The majority were prescribed injectable semaglutide (55.7%), followed by injectable dulaglutide (27.4%), and oral semaglutide (13.2%). The PG had significantly greater reductions in both weight [-1.9 kg, 95%CI: -5.1,0.1; $p = 0.03$], and BMI [-0.78 kg/m², 95%CI: -1.94,0.04; $p = 0.02$] compared to the NPG. No significant differences were observed in HbA1c or blood lipid levels. Gastrointestinal side effects were more common among the NPG (37.2% vs 15%). Concomitant usage of SGLT2 inhibitors was the strongest predictor of treatment persistence (+16.2 weeks), with lower baseline HbA1c and urine albumin-creatinine ratio also linked to treatment persistence.