

## Adult E-Poster

and favorable lipid profiles (HDL  $\geq 1.2$  mmol/L, LDL  $< 2.6$  mmol/L) were protective. Moderate obesity (BMI 26.5–39.9) was universally associated with muscle gain, whereas severe obesity (BMI  $\geq 40$ ) showed mixed outcomes. Beta-blockers and hormones promoted muscle retention, while statins and protease inhibitors correlated with muscle decline.

### CONCLUSION

Metabolic control, rather than BMI alone, plays a critical role in muscle retention among obese individuals. Glycemic and lipid optimization may be key in mitigating sarcopenia risk in metabolic obesity.

## EP\_A179

### EFFECTS OF SGLT2 INHIBITOR INITIATION ON INSULIN-TREATED TYPE 2 DIABETES PATIENTS: A SINGLE CENTRE EXPERIENCE

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### INTRODUCTION

Sodium-glucose co-transporter-2 (SGLT2) inhibitors have revolutionized the management of type 2 diabetes mellitus (T2DM) by enhancing glycaemic control, promoting modest weight loss, and providing proven cardiovascular and renal benefits. The impact of SGLT2 inhibitors on insulin-treated T2DM patients has also been highlighted in major clinical trials. This study examines the effects of SGLT2 inhibitors in insulin-treated T2DM patients in a dedicated diabetes clinic, focusing on HbA1c, insulin dosage and regimen, and weight changes after six months of treatment.

### METHODOLOGY

This retrospective study was conducted at the diabetes clinic of Hospital Sultan Haji Ahmad Shah. Insulin-treated T2DM patients who were initiated on SGLT2 inhibitors between June and August 2024 were included in the study. Patients on concomitant GLP-1 receptor agonist therapy were excluded. Electronic medical records were reviewed for patient follow-up records.

### RESULT

Fifty patients were included in the study, with a mean age of 52.32 years, and a predominance of female patients (64%). 74% of the patients were initiated on empagliflozin. The initiation of SGLT2 inhibitors resulted in a 12% reduction in basal-bolus therapy, with insulin treatment being de-intensified to premixed insulin therapy. There was a modest reduction in total daily dose (TDD) of insulin

use (mean reduction 1.12 units, SD 19.4), HbA1c (mean reduction 0.36%, SD 1.8), and weight (mean reduction 1.02 kg, SD 7.5). 34% of patients experienced a reduction in TDD insulin use of more than 5 units, and 66% showed a reduction in HbA1c levels. In the empagliflozin-treated group, there was a greater reduction in TDD insulin and weight, while the dapagliflozin-treated group showed a greater reduction in HbA1c.

### CONCLUSION

Initiation of SGLT2 inhibitors in insulin-treated T2DM patients has shown promising effects, supporting the initiative for insulin deintensification. However, further exploration and investigation are needed to assess the long-term metabolic effects and durability of SGLT2 inhibitor treatment.

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### DIABETIC KETOACIDOSIS MANAGEMENT IN HOSPITAL SULTAN HAJI AHMAD SHAH (HOSHAS): A CLINICAL AUDIT

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### INTRODUCTION

Diabetic ketoacidosis (DKA) is a serious condition and improper initial assessment and management may lead to undesirable outcomes and even death. This clinical audit aimed to evaluate adherence to DKA management in HoSHAS according to standardized national and local guidelines. The standards pre-determine by local standards were: (1) Severe DKA patients should be managed in an ICU/HDW setting; (2) All patients should be treated according to standardized guidelines (fluid and insulin therapy, observation) and achieve resolution of DKA within 24 hours of diagnosis; (3) All patients should be assessed by diabetes educators prior to discharge; (4) All patients should have a well-documented discharge and follow-up plan.

### METHODOLOGY

This audit was conducted from November to December 2024, involving all adult patients (aged 18 years and above) who met the diagnostic criteria for DKA. Patients with concurrent cardiac disease, ESRD, elderly patients, and pregnancy were excluded. Patient demographics and clinical data were collected from electronic medical records.

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### RESULT

Thirty patients were included with predominant male (56.7%) and Malay ethnicity (90%) and median age of 54 years. Majority had underlying T2DM (93.3%) and presented with sepsis (96.7%). The median length of hospital stay was 5.5 days. 33.3% of patients had severe DKA, but only 30% were managed in an ICU/HDW setting. All patients were treated according to standardized guidelines and had resolution of DKA within 24 hours. Only (55.5%) of patients were assessed by diabetes educators before discharge. Majority of patients had a well-documented discharge plan, but only (70%) had follow-up care arranged within the hospital.

### CONCLUSION

The audit revealed good adherence to standardized DKA management protocols. However, there is room for improvement in the prioritization of severe DKA cases for ICU/HDW admission. The importance of diabetes educators in the post-recovery phase of DKA should be better recognized, and follow-up care process needs to be enhanced.

## EP\_A181

### DIABETES EDUCATOR STATUS AND WELL-BEING STUDY IN PAHANG

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### INTRODUCTION

Diabetes educators (DEs) are essential in shared decision-making for diabetes care. Psychological and social factors influence their well-being, motivation, and efficiency in delivering care.

### METHODOLOGY

This is a cross-sectional study conducted from June to November 2024, involving DEs in Pahang using the QPS Nordic questionnaire. Responses were measured on a Likert scale (1: Very Seldom/Never to 5: Very Often/Always), assessing job demands, role clarity, role conflict, job predictability, mastery perception, leadership support, social climate, work-life balance, and motivation.

### RESULT

Seventy-five DEs participated in the study (mean age: 39.3 years, SD: 5.5). Fifty-seven percent were hospital-based (80% in wards, 20% in clinics), and 43% worked in primary care. 65% had over five years of experience. The respondents had a neutral view of their quantitative job

demands (Mean score: 3.09) and had good role clarity in their institution (Mean score: 3.96). However, they faced significant conflict in completing their responsibilities and inadequate resources in their daily work. Job predictability was perceived as neutral in both short-term and long-term aspects. Most respondents were positive about their work quality and were satisfied with their ability to complete tasks. The respondents viewed their immediate superiors positively, particularly in listening to their work-related problems. Despite this, the respondents had a neutral view on superiors' empowering leadership or creating space to voice opinions. Respondents felt there was no job interference with their personal life (Mean score: 2.71). They were highly motivated to achieve success, recognition, and security in their careers, with a focus on a peaceful and healthy working environment.

### CONCLUSION

Diabetes educators in this study demonstrated high motivation to excel in their profession but faced significant difficulties in fulfilling their roles. Emphasizing empowering leadership and fostering a supportive work environment are crucial to improving diabetes educators' motivation, learning, and efficiency.

## EP\_A182

### A RETROSPECTIVE REVIEW OF ADRENAL INCIDENTALOMAS IN MALAYSIA: CLINICAL CHARACTERISTICS AND NATURAL HISTORY

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### INTRODUCTION/BACKGROUND

Adrenal incidentalomas (AI) are frequently detected during imaging for unrelated conditions, with the majority being benign and non-functional. Numerous studies on AIs have been conducted in the Western countries but there is a lack of data from this region.

### METHODOLOGY

This retrospective study aimed to describe the clinical and radiological characteristics, as well as the natural history of AIs in a Malaysian cohort. Medical records of 251 AI patients from three tertiary hospitals were reviewed. Baseline demographic data, imaging characteristics, hormonal evaluations and histopathological findings were collected. Follow-up data on serial imaging, hormonal re-evaluations and eventual outcome were captured.