

**EP\_A039****A SNAPSHOT OF TYPE 1 DIABETES CARE AMONG ADULTS IN MALAYSIA: DATA FROM A SINGLE ACADEMIC MEDICAL CENTRE**

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**INTRODUCTION/BACKGROUND**

There is a dearth of data on adults living with Type 1 Diabetes (T1D) in Malaysia.

**METHODOLOGY**

This descriptive study aims to systematically collect current data and identify gaps among adults living with T1D in Malaysia. Data was extracted from electronic medical records of patients registered under the T1D clinic at Universiti Malaya Medical Centre (UMMC). All patients aged 18 and above in 2023 were included.

**RESULTS**

There was a total of 107 patients with T1D (mean age 42.0 ± 12.7, mean HbA1c 8.0 ± 1.6%, mean BMI 24.5 ± 4.1 kg/m<sup>2</sup>). The majority were Chinese (52.3%), followed by Malays (24.3%) and Indians (23.4%). The median age at T1D diagnosis was 18.0 years (IQR: 14.0). Almost half (42.1%) presented with diabetic ketoacidosis (DKA) at diagnosis. One in four patients had diabetes-associated autoantibody tests done. Autoantibody positivity was in this order: GADA (22.4%), ICA (6.5%), IA2A (5.6%) and IAA (1.9%). Co-morbid autoimmune conditions were reported in 16.2%, of which thyroid disease (61.1%) was most common. In terms of treatment, the majority were on analogue insulin (89.7%) delivered using multiple daily injections (79.4%). Of the 22 (20.6%) patients using insulin pumps, 50% were using manual pumps, whereas the others were using either sensor-augmented pumps or advanced hybrid closed-loop systems. Most (81.3%) patients used self-monitoring of blood glucose (SMBG) whereas 23.4% employed continuous glucose monitoring (CGM) systems for glycemic surveillance. Incident hypoglycemia within the preceding three months was reported among 60.7%, the

majority (95.4%) of which were mild, and none reported severe. The incidence of DKA within the preceding six months was 4.7%. Retinopathy (19.6%) was the most prevalent complication, followed by kidney disease (15%) and atherosclerotic cardiovascular disease (7.5%).

**CONCLUSION**

This data serves as a baseline for a registry of local T1D patients, whereby future longitudinal analyses may unveil patterns of disease outcomes to guide clinical care unique to our setting.

**EP\_A040****PRELIMINARY ASSESSMENT IN MANAGEMENT OF DIABETIC KETOACIDOSIS IN A TERTIARY CARE SETTING**

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**INTRODUCTION/BACKGROUND**

Diabetic ketoacidosis (DKA) exacts a huge burden on the healthcare system despite numerous advancements in anti-diabetic therapies and updated clinical practice guidelines. The incidence of DKA for Type 1 and Type 2 DM is between 4.6 to 8 episodes per 1000 people.

**METHODOLOGY**

An assessment was made of the admissions of DKA into a tertiary centre in East Malaysia to evaluate the characteristics of these patients and identify potential management pitfalls. All patients admitted with a diagnosis of DKA and referred to the endocrine team in Hospital Tengku Ampuan Afzan, Kuantan between December 2023 to March 2024 were analysed. Data was collected for age, date of admission, HbA1c, total daily dose of insulin, DKA history and SGLT2 inhibitor use, amongst others.

**RESULTS**

Over four months, a total of 28 patients were assessed. There were 4 Type 1 and 24 Type 2 DM patients. Two type 1 DM patients were readmitted with DKA during the same period while 5 patients in total were admitted with DKA within the preceding 6 months. The mean age was 45 (± 17) years old and the mean HbA1c around their presentation was 11.2% (± 4.2%). Two patients were on SGLT2 inhibitors while 15 patients were on insulin with a mean total daily dose of 39 (± 17) units. Five patients were admitted to the ICU and the most common predisposing cause for DKA