

pleocytosis with elevated protein levels. CSF screening for infection, paraneoplastic antibodies and oligoclonal bands yielded negative results. Her CSF GAD-Ab was positive, and her serum GAD-Ab was markedly elevated (280 IU/L), as were her anti-islet cell antibodies (87.5 IU/mL). Her HbA1c was 10.9%, with evidence of proteinuria but no diabetic retinopathy. She was managed with intravenous (IV) immunoglobulin and methylprednisolone followed by oral steroids, with subsequent improvement in her ataxic gait. Her diabetes was managed with basal-bolus insulin.

### CONCLUSION

Autoimmune cerebellar ataxia is a rare condition that can be associated with high levels of GAD-Ab and, frequently, autoimmune diabetes. As this condition may result in chronic disabling neurological impairment, prompt diagnosis to facilitate treatment is imperative.

## EP\_A050

### UNDERPRESCRIPTION OF SGLT2i IN TYPE 2 DIABETES PATIENTS WITH CARDIORENAL DISEASE IN A PUBLICLY FUNDED TERTIARY CENTER IN MALAYSIA

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### INTRODUCTION/BACKGROUND

Large-scale randomized controlled trials have proven that sodium-glucose cotransporter-2 inhibitors (SGLT2i) significantly reduce risks of atherosclerotic cardiovascular disease (ASCVD), heart failure (HF) and chronic kidney disease (CKD) in patients with type 2 diabetes (T2D). However, TARGET-T2D has shown that the use of guideline-directed medical therapy with SGLT2i is suboptimal even in Greater Kuala Lumpur, which has the highest mean household incomes in Malaysia.

### METHODOLOGY

We hypothesize that the use is even lower in our centre. This cross-sectional clinical audit involves all patients aged 18 years and older with T2D who visited the general medicine clinic of Hospital Sultan Ismail from 31st March to 4th April 2024. Their electronic medical records were reviewed for the presence of ASCVD, HF and CKD, and SGLT2i prescriptions.

### RESULTS

A total of 224 patients were included. After excluding those with eGFR <20 ml/min/1.73 m<sup>2</sup>, 175 patients were identified.

Among them, 116 (66.3%) have at least one cardiorenal disease. Fifty patients (28.6%) have ASCVD, 31 (17.7%) have HF and 92 (52.3%) have CKD. However, only 29 (25%) are on SGLT2i. Interestingly, it was higher than the 13.2% reported by TARGET-T2D for general medicine clinics in Greater Kuala Lumpur. Aside from 3 patients who received hospital-funded SGLT2i, most (89.7%) are self-funded.

Among the 87 patients with indications to start SGLT2i but are not on it, six were recommended to purchase the medication but could not afford it. The other 81 patients did not receive such advice. None had SGLT2i withheld due to urogenital tract infections or euglycemic diabetic ketoacidosis.

### CONCLUSION

SGLT2i remains critically underused in T2D patients with cardiorenal disease. Increasing public funding for SGLT2i could help bridge the gap between evidence and clinical practice. Even if public funding is not sufficient, health professionals should advise patients with indications to start SGLT2i to self-purchase, considering its overwhelming clinical benefits.

## EP\_A051

### ASSESSING THE IMPACT OF EXERCISE ON BLOOD SUGAR CONTROL: A STUDY AMONG HOSPITAL STAFF IN TELUK INTAN, MALAYSIA

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### INTRODUCTION/BACKGROUND

With Malaysia experiencing a high prevalence of diabetes mellitus and obesity, emphasis is placed on promoting healthy lifestyle interventions such as dietary modifications and, notably, exercise. Exercise enhances insulin sensitivity, aids in managing blood glucose levels and promotes weight reduction.

### METHODOLOGY

This research aims to determine the impact of exercise on glycemic control by investigating the effect of a 3-kilometer walk on glucose levels. The study was exclusive to hospital staff. Blood glucose levels were measured using a glucometer before and after the 3-km walk. The walk was conducted without breaks, and participants refrained from consuming food or drinks during the activity.

**RESULTS**

Ninety-six individuals participated in the exercise, with 64% classified as overweight or higher. Mean age was 38.9 years. All of the participants completed the 3 km walk in 30 minutes. Only 76 individuals consented to have their glucose levels checked before and after the exercise. Among the participants, 5.3% (n = 4) had pre-existing diabetes. The average sugar level before the 3 km walk was 6.12 mmol/L and decreased to 5.43 mmol/L after walking, indicating a mean reduction of 0.69 mmol/L. Gender and BMI had no significant impact on the difference in mean glucose levels. However, there was a notable difference in glucose levels among age groups, particularly in the older age group (51-60 years old), which showed a significant difference ( $P = 0.038$ ) compared to the younger age group.

**CONCLUSION**

Walking provides a safe and accessible option for managing diabetes. Walking for 3 km can decrease sugar levels by up to 0.7 mmol/L within 30 mins. Additionally, it was observed that older patients experience a more pronounced reduction in glucose levels compared to younger individuals. Given that a significant proportion of patients with diabetes patients fall within the older age group, exercise is essential for better glycemic control.

**EP\_A052**


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**OPTIMIZING MANAGEMENT FOR ADULT TYPE 1 DIABETES MELLITUS PATIENTS: AN ENDOCRINE CLINIC AUDIT**

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**INTRODUCTION/BACKGROUND**

Type 1 Diabetes Mellitus (T1DM) imposes significant healthcare challenges due to its lifelong management requirements.

**METHODOLOGY**

This study aims to assess the demographics, treatment modalities, and glycemic control among T1DM patients attending the Endocrine Clinic at Hospital Teluk Intan.

**RESULTS**

A total of 24 adult T1DM patients were studied, with a mean age of 28 years at presentation and a mean age of 15.21 years at diagnosis. The majority were Malay, followed by Indian and Chinese. There were more females than males. Mean duration of follow-up was six years. The most prevalent comorbidities were retinopathy, mental illness and obesity.

Only 12.5% of patients achieved target HbA1c levels (<6.5%). Basal-bolus human insulin was the most commonly prescribed regimen, followed by insulin analogues and a combination of both. Routine self-monitoring of blood glucose (SMBG) was infrequent, with only four patients adhering to it regularly. This may not accurately represent the entire nation, as some T1DM patients may be managed under private practices.

Several factors could contribute to suboptimal sugar control. First, socioeconomic challenges such as poverty may require individuals to work extensively, resulting in fewer food options besides cheap, high-glycemic index diets. Furthermore, insufficient understanding of the disease, possibly due to underlying mental health conditions, can impede individuals' comprehension of the ramifications of poorly controlled diabetes. Inadequate social support also plays a role; patients with strong familial support tend to achieve better glycemic control than those without. Another contributing factor is the absence of Diabetic Resource Centers (DRCs) in hospitals, depriving individuals of a place to seek assistance with insulin pen issues and other diabetes-related challenges.

**CONCLUSION**

This study highlighted the challenges in achieving optimal glycemic control among T1DM patients attending our clinic. Despite the availability of various insulin regimens, a significant proportion of patients have suboptimal HbA1c levels, emphasizing the need for treatment intensification, enhanced patient education, improved adherence to SMBG and individualized insulin titration. Addressing comorbidities and individualizing treatment regimens is crucial in enhancing the overall care of T1DM patients.