## EP_A027

### GAPS IN THE MANAGEMENT OF TYPE 2 DIABETES MELLITUS AMONG WOMEN LIVING WITH HIV IN AN ACADEMIC MEDICAL CENTRE

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#### INTRODUCTION

Type 2 Diabetes Mellitus (T2DM) poses significant cardiovascular risks. Individuals with HIV face compounded risks due to accelerated aging, chronic inflammation and certain antiretroviral therapies (ART). Postmenopausal women have increased cardiovascular risk. However, data on women living with HIV (WWH) and T2DM in Malaysia is scarce.

#### METHODOLOGY

This study examines gaps in the management of T2DM and cardiometabolic health among WWH undergoing routine HIV care in a tertiary hospital. We reviewed the electronic medical records of WWH with T2DM attending the Infectious Diseases (ID) Clinic at Universiti Malaya Medical Centre (UMMC) in 2023. We extracted HIV demographics, anthropometrics, latest HbA1c, fasting plasma glucose (FPG) and lipid levels, and defined targets for control as per the 6th Malaysian Clinical Practice Guidelines for T2DM. Gaps in care were defined as the proportion not achieving targets for control of metabolic parameters.

#### RESULTS

We collected data from 33 WWH with T2DM, representing 17.8% of all WWH in ID UMMC. Their median age was 54 years (IQR 49, 61) and the median duration since HIV diagnosis was 19 years (IQR 14, 25). All were on ART, with 30 (90.9%) having suppressed viral loads. Menopause status was recorded in 57.6% (n=19), with 78.9% (n=15) being menopausal. Four (12.1%) were active smokers. For T2DM management, 26 (96.3%) were on oral antidiabetic drugs (OADs) and 1 (3.7%) was on insulin. The most used OADs were metformin (65.7%), followed by sulfonylurea (25.7%) and SGLT2i (2.9%). Overall, 60.6% (n = 33) met the HbA1c target of <7% and 66.7% had an FPG within 4.4-7.0 mmol/L (n = 30/33). For lipids, 54.8% (n = 31/33) had triglycerides ≤1.7 mmol/L, 67.7% (n=31/33) HDL >1.2 mmol/L, and 56.7% (n = 30/33) LDL ≤2.6 mmol/L. 72.7% were on statins. For BP, only one (0.03%) had readings within the target range. 36.4% were on an ACE inhibitor or angiotensin-receptor blocker. Only 33.4% had an ideal BMI.

#### CONCLUSION

There are significant gaps in managing T2D among WWH. Addressing these gaps requires interdisciplinary collaboration for integrated care solutions.

## EP_A028

### ANALYSIS OF DIABETIC KETOACIDOSIS CASES IN HOSPITAL TELUK INTAN IN 2023

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#### INTRODUCTION

There is an increase in the incidence of diabetes mellitus (DM) in Malaysia and worldwide. Diabetic ketoacidosis (DKA) is one of the most serious acute complications of diabetes and is even the first presentation of diabetes in some patients.

#### METHODOLOGY

This study aims to evaluate the incidence and outcome of DKA patients in a district hospital Hospital Teluk Intan (HTI) in 2023. This is a retrospective audit which included every patient who was admitted for DKA in HTI from January 2023 until December 2023. The data was collected from clinical notes and electronic medical records.

#### RESULTS

Forty subjects were included in this audit which comprised 20 males and 20 females. The median age of the study population was 53.5 years and most patients were Malay (82.5%), followed by Indian (10%) and Chinese (7.5%). Most of them had type 2 DM [34 (87.5%)] whereas the rest had type 1 DM [4 (10.3%)] and newly diagnosed DM [1 (2.6%)]. The most common causes of DKA were sepsis [22 (55%)] and non-compliance to medications [16 (40%)]. The mean HbA1c during admission was 13.9% and the median length of stay was 5.5 days. Twelve patients (30%) had severe DKA and 17 patients (42.5%) required ICU/HDU admission in which 2 patients (5%) required intubation. About 2/3 of patients [24 (60%)] had DKA resolution within 24 hours of admission and most patients were discharged home [37 (92.5%)]. The low mortality rate could be due to early diagnosis and high admission to ICU/HDU.

### CONCLUSION

The high number of DKA cases is mainly caused by sepsis and non-compliance to medication, which are critical areas to address to prevent DKA occurrences. While infections may be inevitable, it is essential to counsel diabetes patients on the importance of strict adherence to their medications to avoid serious complications.

## EP_A029

## A CLINICAL AUDIT ON STATIN THERAPY AMONG TYPE 2 DIABETES MELLITUS PATIENTS ATTENDING PUSAT PERUBATAN ANGKATAN TENTERA (PPAT), SUNGAI BESI, MALAYSIA

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### INTRODUCTION/BACKGROUND

Type 2 Diabetes Mellitus (T2DM) patients are at higher risk of developing atherosclerotic cardiovascular disease (ASCVD), which leads to increased morbidity, mortality and use of healthcare resources. Therefore, the primary prevention of ASCVD can be achieved by prescribing the appropriate doses of statin therapy depending on the patient's risk. This is a clinical audit on the use of statin therapy among type 2 Diabetes Mellitus patients at PPAT, Sungai Besi.

### METHODOLOGY

This clinical audit aims to improve the quality of care of adult patients with T2DM in preventing ASCVD by utilizing the T2DM Clinical Practice Guidelines (CPG) 2020. A retrospective clinical audit was conducted using a convenient sampling method that involved 32 medical records from PPAT, Sungai Besi. Adults aged above 40 years with T2DM diagnosed for more than six months, and under active follow-up, were included. The criteria were based on the T2DM Clinical Practice Guidelines (CPG) 2020, with standards set at 90% and 50% based on literature reviews.

### RESULT

A total of 32 medical records were audited. Most subjects were male (53%), with a median age of 54 years. 90.63% of T2DM adults were on statin therapy. The usage of statin therapy in T2DM patients above 40 years old is satisfactory and achieved the standard of 90%. However, only 20.69% were on high-intensity statin therapy and did not achieve the standard of 50%.

### CONCLUSION

These issues need to be addressed by training healthcare providers. Enhancing clinic protocols to address relevant issues is imperative to enhance overall diabetes care, particularly ensuring appropriate utilization of statin therapy in T2DM patients who are either at high risk or very high risk of ASCVD.

## EP_A030

## UNVEILING EARLY CARDIOVASCULAR DISEASE PREDICTION IN TYPE 2 DIABETES: POTENTIAL ROLE OF CARDIOMETABOLIC BIOMARKERS

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### INTRODUCTION/BACKGROUND.

Type 2 diabetes individuals are at higher risk of developing cardiovascular disease compared to the general population. Cardiovascular disease remains the leading cause of death in type 2 diabetes despite vigilant monitoring. Early detection of type 2 diabetes patients predisposed to cardiovascular complications is important to reduce the disease burden.

### METHODOLOGY

This study aimed to investigate the potential role of cardiometabolic biomarkers in cardiovascular risk prediction among type 2 diabetes patients. A case-control