majority were male patients (63.1%), and more than half (58.8%) had background diabetes mellitus. The incidence of hypoglycemia post-insulin chase was 16.6%. Patients who developed hypoglycemia had a significantly higher median creatinine level (678 umol/l vs. 349 umol/l, p = 0.005). Prior use of sulfonylurea was also significantly associated with an increased risk of hypoglycemia (26.3% vs. 8.8%, p = 0.031). Factors such as age, gender, race, presence of diabetes mellitus, and prior insulin use were not found to be significantly associated with the development of hypoglycemia. Almost one-quarter of patients (23.5%) did not have BG checked prior, and only 40.6% had BG monitoring planned post-insulin chase.

CONCLUSION

This audit demonstrated a 16.6% incidence of hypoglycemia post-insulin chase. Renal impairment and prior sulfonylurea use were significant risk factors. There is a need to improve the planning and implementation of pre- and post-treatment glucose monitoring to prevent hypoglycemia.

EP_A199

PRESCRIBING PATTERNS OF SGLT2 INHIBITORS IN TYPE 2 DIABETES MANAGEMENT AT A TERTIARY CARE CENTER IN MALAYSIA

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Siao Hui Lee, Farizan binti Abdul Ghaffar, Jazlina Liza Dato' Jamaluddin, Farah Nadirah binti Abd Rahman, Muhammad Amir Rayhan bin Jailani, Nur Amirah binti Mat Haril, Chan Yen Tay

Pharmacy Department, Hospital Kuala Lumpur, Malaysia

INTRODUCTION

Type 2 diabetes (T2D) continues to pose a significant public health challenge in Malaysia, affecting approximately 20% or 4.4 million adults. Among the newer treatment options, sodium-glucose co-transporter-2 inhibitors (SGLT2-i) have gained increasing attention due to their proven glycaemic and cardiorenal benefits. Despite the increasing adoption of SGLT2-i due to established glycaemic and cardiorenal benefits, Malaysia-specific prescribing patterns remain understudied, particularly in tertiary healthcare environments. This study aimed to evaluate the prescribing patterns of SGLT2-i and its relationship with antidiabetic utilization in T2D patients at Hospital Kuala Lumpur.

METHODOLOGY

This retrospective cohort study used patient data from the Pharmacy Information System (PhIS) and Lab Management System (LMS). Patients aged 18–70 years diagnosed with T2D and prescribed empagliflozin or dapagliflozin between January - December 2023 were included. Data on demographics, initiation date of SGLT2-i, medication history, and HbA1c levels were extracted. Adherence to prescribing guidelines was assessed by comparing initiation criteria, dosing, and drug combinations against recommendations outlined in the Malaysian Clinical Practice Guidelines (6th edition). Medication adherence was measured using the Medication Possession Ratio extracted from PhIS. HbA1c levels before and after SGLT2-i treatment in adherent patients were compared using the Wilcoxon signed-rank test, with a significance level set at 0.05.

RESULT

Among the 256 patients analyzed, 77.3% of prescriptions adhered to national guidelines, with excellent dose compliance (97.3%). Combination therapy was predominant (98%), with metformin (82%), vildagliptin (54%), and gliclazide (20%) most frequently prescribed concurrently. Additionally, 60.2% received insulin concurrently with SGLT2-i. Notably, adherent patients experienced significant HbA1c reductions from a median baseline of 7.5% to 7.2% post-treatment (p = 0.019).

CONCLUSION

SGLT2-i prescribing practices at HKL closely align with national guidelines, primarily involving combination therapy. The observed significant improvement in glycaemic control among adherent patients underscores the value of SGLT2-i in routine clinical management of T2D. Future research should focus on long-term clinical outcomes and economic implications of widespread SGLT2-i use.

EP_A200

EFFECTS OF SODIUM-GLUCOSE COTRANSPORTER-2 INHIBITORS ON HEMATOCRIT AMONG PATIENTS WITH TYPE 2 DIABETES MELLITUS: A TERTIARY CENTER EXPERIENCE

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Jia Jun Khoo, Mohd Idris Mohamad Diah, Shamharini Nagaratnam, Chin Voon Tong

Department of Medicine, Institut Endokrin, Hospital Putrajaya, Malaysia

INTRODUCTION

Sodium-glucose cotransporter-2 inhibitors (SGLT2i) have become integral to managing Type 2 Diabetes Mellitus (T2DM) due to their cardiorenal benefits. They promote osmotic diuresis, leading to hemoconcentration and increased erythropoiesis, which may theoretically raise

thromboembolic risk. Emerging data suggests these changes reflect improved renal function and support their benefits. This study aimed to assess the impact of SGLT2 inhibitors on haematocrit in our patients with T2DM.

METHODOLOGY

This retrospective observational study involved patients with T2DM initiated on SGLT2 inhibitors at our center between January 2024 and September 2024. Patients were included if they received continuous empagliflozin for more than 3 months. We collected data on hemoglobin (Hb) and hematocrit (Hct) levels at baseline and up to 6 months post-initiation. Erythrocytosis was defined according to the 2016 WHO criteria: Hb >16.5 g/dL and/or Hct >49% in men and Hb >16 g/dL and/or Hct >48% in women.

RESULT

This study included 88 patients with T2DM (45 men [51.1%], 43 women [48.9%]) with a median age of 62.0 years (IQR 53-70). The cohort had a median diabetes duration of 10.0 years (IQR 4-19) and a median baseline HbA1c of 7.9% (IQR 6.7-9.8). After a median follow-up of 6.0 months (IQR 6-9), we observed significant increases in hematologic parameters: hemoglobin (12.9 ± 1.8 to 13.5 ± 1.6 g/dL, p <0.001), hematocrit (40.10 ± 5.3% to 41.3 ± 4.7%, p <0.001), and RBC count (4.75 ± 0.77 to 4.98 ± 0.72 × 10^{12}/L, p <0.001). HbA1c decreased by a median of 0.5% (IQR -1.0 to 0.0, p <0.001). Despite these hematologic changes, post-treatment erythrocytosis prevalence remained low at 5.7% (5/88), and no treatment discontinuation was required.

CONCLUSION

These findings demonstrate that while SGLT2 inhibitors predictably increase hematologic indices, the risk of clinically significant erythrocytosis remains low. The observed hematologic changes likely represent adaptive physiological responses contributing to empagliflozin's cardiorenal protective effects.

EP_A201

WILL YOU CARE FOR ME: PROTOCOL AND BASELINE CHARACTERISTICS OF THE PILOT CARDIOLOGY-RENAL-METABOLIC (CaReMe) INTEGRATED CLINIC IN MALAYSIA

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Tharsini Sarvanandan,[1] Jun Kit Khoo,[1] Ying Guat Ooi,[1] Lee-Ling Lim,[1] Soo Kun Lim,[2] Shok Hoon Ooi,[2] Chang Chuan Chew,[2] Soo Ying Yew,[2] Jun Min Em,[2] Kok Han Chee,[3] Ru Peng New,[3] Izzah Nazura Ismail,[3] Jeyakantha Ratnasingam[1]

[1]Endocrine Unit, Department of Medicine, Faculty of Medicine, University Malaya, Kuala Lumpur, Malaysia

[2]Division of Nephrology, Department of Medicine, Faculty of Medicine, University Malaya, Kuala Lumpur, Malaysia

[3]Cardiology Unit, Department of Medicine, Faculty of Medicine, University Malaya, Kuala Lumpur, Malaysia

INTRODUCTION

At least one in three Malaysians living with type 2 diabetes (T2D) develops cardio-renal complications. Current management strategies are fragmented. The pilot, Cardiology-Renal-Metabolic (CaReMe) Clinic in Malaysia, aims to integrate care of patients with T2D by focusing on patient-centred, guideline-directed medical therapy (GDMT) use.

METHODOLOGY

This is a pilot CaReMe clinic in Southeast Asia that was established at our centre. Patients with T2D and renal or cardiovascular complications were recruited for weekly virtual clinics. These clinics involve multidisciplinary meetings between cardiology, nephrology, and endocrinology specialists. Patients' cases and current issues were high-lighted, medications reviewed, and management plans formulated. Patients were followed up every six months with data collected at baseline and every six months for two years to assess metabolic, cardiovascular, and renal outcomes, including patient-related quality-of-life measures (SF 12). Patients in the CaReMe cohort were compared against standard care by propensity score matching methods.

RESULT

One hundred forty-two patients have been recruited (mean age: 62.9 ± 11.4 years, 55.6% men). The mean baseline HbA1c was 8.9 ± 1.7 %, with a mean duration of diabetes of 18.2 ± 10.0 years. The mean BMI and waist circumference were 29.6 ± 6.9 kg/m^2 and 101.5 ± 15.3 cm, respectively. Majority of patients had hypertension (96.4%) and dyslipidaemia (95.0%). In terms of ASCVD, 28.2% had coronary artery disease, 12.0% had stroke, while 2.8% had peripheral arterial