was conducted. The statistical analysis was conducted on 113 patients who underwent follow-up for at least 6 months.

RESULTS

Among 113 patients, 68.5% were female participants and the mean age of the patients was 60 years. Their mean HbA1c was 9.36%, and their mean body mass index was 29.1 kg/m^2. From baseline to 6 months, HbA1c levels decreased significantly (- 0.92%, $p<0.05$). 61.6% of patients lowered their HbA1c levels by 0.5% in 6 months. There were no statistically significant reductions in fasting blood glucose, systolic blood pressure, weight, body mass index, or serum low-density lipoprotein (LDL).

CONCLUSION

A diabetes one-stop clinic showed significant improvement in HbA1c levels of around 0.9% in 6 months without an increase in body mass index. This study supports the benefits of treating type 2 diabetes using multidisciplinary teams that may help optimize glycemic control in clinical practice.

KEYWORDS

diabetes mellitus, multidisciplinary care, integrated health care systems, one-stop clinic

PP-D-11

UTILITY OF CONTINUOUS GLUCOSE MONITORING TO DETECT SYMPTOMATIC REACTIVE HYPOGLYCEMIA IN DIPEPTIDYL PEPTIDASE-4 INHIBITOR/ METFORMIN COMBINATION THERAPY-TREATED T2D INDIVIDUALS: AN ILLUSTRATIVE CASE REPORT

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CASE

"Relative hypoglycemia" is a phenomenon characterized by an increase in the glycemic threshold for detecting and responding to hypoglycemia. Herein, we illustrated a case of non-insulin requiring well-controlled diabetes presented with postprandial glucose.

A 60-year-old Thai female with well-controlled T2D for 5 years presented with a 6-month history of regularly experiencing symptoms consistent with hypoglycemia without any other alarm symptoms. She is taking a combined tablet of sitagliptin 100 mg/ metformin extended-

release 1,000 mg and her latest A1C values varied from 6.1-6.5% in the past 6 months. Continuous glucose monitoring (CGM) revealed postprandial hyperglycemia and subsequent low-normal interstitial glucose levels. Further dietary recall revealed her excessive refined carbohydrate or fruit juices before the onset of hypoglycemic symptoms. Low glycemic index foods and avoiding excessive carbohydrates had been advised. Her symptoms markedly improved, thereafter.

CGM provides important information regarding overall glycemic excursion over time in this patient.

KEYWORDS

reactive hypoglycemia, continuous glucose monitoring, CGM, type 2 diabetes

PP-D-12

PREVALENCE OF SGLT2 INHIBITOR AND GLP-1 RECEPTOR AGONIST PRESCRIPTIONS IN PATIENTS WITH COMORBID DIABETES AND CARDIOVASCULAR DISEASE IN RAJAVITHI HOSPITAL

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INTRODUCTION

The clinical relevance of sodium-glucose co-transporter 2 inhibitors (SGLT2i) and Glucagon-like peptide 1 receptor agonists (GLP-1 RA) has been rapidly evolving for the treatment of type 2 diabetes mellitus (T2DM), especially in patients with cardiovascular comorbidities. There is a lack of global data on the prescription prevalence of these medications. The primary objective of this study was to estimate the prevalence of SGLT2i and GLP-1 RA prescriptions in patients with comorbid diabetes and cardiovascular disease in Rajavithi Hospital from 2017 to 2020. Another objective was to further characterize the patients regarding demographic, clinical parameters, and other medication usage between patients who were and were not prescribed SGLT2i and/or GLP- 1 RA.

METHODOLOGY

Data were collected from adults with comorbid diabetes and cardiovascular disease managed in Rajavithi Hospital, Thailand between January 1, 2017, and December 31, 2020. The prevalence of SGLT2i and GLP-1 RA prescriptions was estimated. Demographic, clinical parameters, and other medication usage between patients who were and were not prescribed SGLT2i and/or GLP-1 RA were reported in the percentages or mean ± standard deviations depending on the type of variable data.

RESULTS

Of the 1114 participants with T2DM and cardiovascular comorbidities, 567 were female (50.9%), mean age of 69.6 years (SD 12.4), mean HbA1c 7.2% (SD 1.8) and 607 (54.5%) were obese. Within the period, the prevalence of SGLT2i and GLP-1RA prescriptions were 4.4% and 1.3% respectively. Most of these medications were prescribed by cardiologists (60.3%) and endocrinologists (39.6%). The prescription rate of these medications was low even if the rate of SGLT2i prescription has increased dramatically in 2020 ($p = 0.003$)

CONCLUSION

The prescription rates of SGLT2 inhibitors and GLP-1 receptor agonists were low, especially in type 2 diabetes mellitus patients with cardiovascular comorbidities, even with a proven benefit of reduced morbidity and mortality from cardiovascular events. These medications should be considered to be prescribed in high-risk patients to improve cardiovascular outcomes independent of A1C.

KEYWORDS

cardiovascular disease, Sodium-glucose co-transporter 2 inhibitors, glucagon-like peptide 1 receptor agonists

PP-D-13

DIRECT MEDICAL COSTS OF TREATING DIABETIC FOOT ULCERS AMONG ADULT FILIPINOS AT THE PHILIPPINE GENERAL HOSPITAL

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INTRODUCTION

Diabetic foot ulcers account for 16-20% of medicine admissions in the national referral center - the Philippine General Hospital (PGH). This study aimed to determine the direct medical costs of hospitalization for diabetic foot ulcers (DFU) among adult Filipinos.

METHODOLOGY

A cross-sectional analytic study design was used, with data taken from Filipino adults admitted for DFU from January to September 2019 and 2020.

RESULTS

There were 437 (308 from 2019, 127 from 2020) included patients, with 59% males, 45.31% from the National Capital Region, and 29.5% had hypertension as comorbidity. The mean age was 56.88 (range: 22-87, SD 11.66). The mean length of hospital stay was 15.5 days (1-102). Seventy percent of the patients underwent surgery. The average cost per patient in 2019 was Php 60,925 (USD 1,177), and Php 82,610 (USD 1,595) in 2020. The highest cost was from medications (antibiotics), followed by diagnostics and then operation fees. For national health insurance (Philhealth) members, coverage is not sufficient for DFU admissions because it only subsidizes a maximum of 50-70% of the total cost among surgical cases. The most common operation done was below-the-knee amputation (45.7% in 2019, 41.6% in 2020), debridement (25.3% in 2019, 13.48% in 2020), and ray amputation (19.5% in 2019, 16.9% in 2020). Most cases were University of Texas Staging System IID (37% in 2019, and 44.6% in 2020).

CONCLUSION

The cost per DFU patient is financially catastrophic for the minimum wage Filipino because it costs at least 40% of the annual income.

KEYWORDS

diabetic foot ulcer, direct medical costs

PP-D-14

EFFECT OF MEAL SEQUENCING ON GLP-1 HORMONE AND POSTPRANDIAL GLUCOSE EXCURSION IN PRE-DIABETIC PATIENTS: A CROSSOVER TRIAL

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INTRODUCTION

Meal sequencing is a novel approach for improving postprandial GLP-1 and glycemic responses. Previous studies have found that consumption of a fiber-enriched diet, high-protein or high-fat diet before a high-carbohydrate diet increased GLP-1 secretion and lowered postprandial glucose excursion. To determine such responses in Thai pre-diabetic subjects, we performed meal sequencing patterns using common Thai meal viands including "boiled vegetables," "grilled pork," and "sticky rice."

METHODOLOGY

We conducted a crossover trial with a meal sequence test in 15 prediabetic adults aged 20 years or older. The participants ingested vegetables followed by meat and sticky rice (V-M-R) on day 1, vegetables with meat followed by sticky rice on day 2 (VM-R), and vegetables with meat and sticky rice on day 3 (VMR). GLP-1 levels and plasma glucose levels were measured at 0, 30, 60, and 120 min after ingestion.