

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.

RESULTS

The consumption of vegetables before meat and sticky rice (V-M-R) significantly increased GLP-1 AUC (0-120) than the consumption of vegetables with meat, followed by sticky rice (VM-R) or vegetables with meat and sticky rice (VMR) (V-M-R 5213.4 ± 2114.37 Vs VM-R 3869.02 ± 1362.68 Vs VMR 3426.16 ± 1478.15 ; $p < 0.05$). Both V-M-R and VM-R induced significantly lower postprandial glucose AUC (0-30) and AUC (0-60) compared to VMR (At 30 min, V-M-R 3154.79 ± 336.9 Vs VM-R 3161.35 ± 230.17 Vs VMR 3585.87 ± 597.49 ; At 60 min, V-M-R 6664.83 ± 673.43 Vs VM-R 6594.59 ± 632.58 Vs VMR 7636.53 ± 1056.38 , $p < 0.05$).

CONCLUSION

The V-M-R meal sequence enhanced more GLP-1 release than other meal sequence patterns (VM-R and VMR) and produced less postprandial glucose excursion. The results provide the possibility of meal sequencing as a new non-pharmacological treatment for diabetic prevention in prediabetic patients.

KEYWORDS

meal sequencing, prediabetes, GLP-1, postprandial glucose

PP-D-15

HYPERTRIGLYCERIDAEMIA-INDUCED PANCREATITIS

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CASE

A 45-year-old male presented with a five-day duration of abdominal pain and yellow pustular skin eruptions on his eyebrow. His abdominal pain was worse after eating and was associated with nausea. The patient had diabetes mellitus since 37 years of age and receiving Gliclazide MR 60 mg twice daily and metformin 500 mg three times daily. He has a family history of diabetes, with his mother suffering from diabetes. He has a hepatitis B infection without current treatment. He was a previous smoker with a 10-pack-year history and stopped only 4 months prior. He has been an alcoholic beverage drinker (half a bottle of whisky) 3 days per week for the last 5 years. Physical examination revealed a fever of 102°F, tachycardia of 100, blood pressure of 130/70 mm Hg, respiratory rate of 16, and oxygen saturation of 96% on room air. He had abdominal tenderness in his right upper quadrant and epigastrium. His skin lesions were discovered to be eruptive xanthoma. Fundoscopy revealed a lipaemic retina. Blood tests revealed a triglyceride of 5460 mg/dl and cholesterol of 558 mg/dl, while liver function test was normal. Blood showed leukocytosis with neutrophil predominance and

CRP was 229.04 mg/l. HbA1c was 8.9%. Amylase was initially 43 U/l, but when rechecked several hours later was 167 U/l. Blood glucose was 443 mg/dl. The abdominal x-ray and a chest x-ray revealed no abnormality. A USG of the abdomen showed an enlarged fatty liver and swollen pancreas. He was diagnosed with Hypertriglyceridemia-induced pancreatitis. The patient was kept nil by mouth and given aggressive fluid resuscitation alongside analgesia for pain review. His blood sugars were closely monitored as the VRII protocol had been started in the Emergency Department. An urgent CT scan was booked which confirmed pancreatitis. An insulin infusion FRII was started and an intravenous antibiotic was given. The patient made a good recovery and was followed up in the clinic for the management of his hyperlipoproteinemia.

KEYWORDS

hypertriglyceridaemia, pancreatitis., diabetes mellitus, alcoholic, amylase

PP-D-16

DIABETIC STRIATOPATHY IN A NEWLY DIAGNOSED TYPE 2 DIABETES MELLITUS: A RARE NEUROLOGIC COMPLICATION

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CASE

Chronic neurological complications are prevalent in patients with type 2 diabetes mellitus. Diabetic striatopathy is a rare, acute neurological complication of Diabetes Mellitus that commonly presents with non-ketotic hyperglycemia and involuntary movements, specifically hemichorea or hemiballismus. Striatal abnormalities on neuroimaging have been reported in most, but not all, cases.

We report the case of a 92-year-old Filipino female with no history of diabetes who presented with acute onset involuntary movements of the left upper extremity of a few hours duration, which progressed to right hemifacial spasm. She was diagnosed with a hyperosmolar hyperglycemic state and treated accordingly. Cranial CT scan findings were unremarkable. There was an immediate resolution of her neurologic symptoms after the correction of hyperglycemia.

The underdiagnosis of diabetic striatopathy highlights the importance of increasing awareness and understanding of this condition among clinicians to prevent delayed diagnosis and treatment. The prognosis for diabetic striatopathy is good with prompt glycemic control.