

RESULTS

Sixty-one subjects completed the study. The mean age of participants was 53.07±7.74 years. The mean duration of diabetes was 11.76 ± 8.26 years. The baseline A1c was 8.48 ± 0.76%. Phase 1 study showed a mean reduction in A1c of 1.02% (95% CI: 0.74–1.30) in the tele-iPDM group and 0.48% (95% CI: 0.19–0.76) in the usual care group. The difference in A1c reduction between the 2 groups was 0.55% [95% CI: 0.15–0.95, $p < 0.05$]. At 24 weeks of follow-up, the mean difference in A1c between the tele-iPDM and usual care groups is 0.72% [95% CI: 0.24–1.20, $p < 0.05$]. There were no significant differences in body weight and body mass index and hypoglycemic events between both groups.

CONCLUSION

Telemonitoring can facilitate the iPDM care model in people with insulin-treated type 2 diabetes mellitus. It improves the efficiency of diabetes care and improves glycemic control at 12 weeks and can maintain glycemic control at 24 weeks.

KEYWORDS

telemonitoring, structured feedback loop, type 2 diabetes, insulin-treated

PP-D-09

IMPACT OF DIABETES AND SARCOPIENIA ON MORTALITY

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Eyun Song and Kyung Mook Choi

Division of Endocrinology and Metabolism, Korea University

INTRODUCTION

Diabetes mellitus (DM) and sarcopenia are growing public health threats in an aging society. They share common pathophysiological mechanisms and are associated with serious health consequences. We investigated the impact of DM and sarcopenia on all-cause and cardiovascular mortalities in a longitudinal nationwide population-based study.

METHODOLOGY

Subjects who participated in the Korea National Health and Nutrition Examination Survey conducted from 2008 to 2011 with available appendicular skeletal muscle mass data were analyzed. Mortality data up to December 2020 were retrieved from the National Death Registry.

RESULTS

Of the 17,920 subjects, 14,737 (82.2%) had neither DM nor sarcopenia (DM-/SP-), 1,349 (7.5%) had only DM (DM+/SP-), 1,425 (8.0%) had only sarcopenia (DM-/SP+), and 409 (2.3%) had both DM and sarcopenia (DM+/SP+). Compared to the DM-/SP- group, all-cause mortality was increased,

with hazard ratios (HRs) of 1.29 (95% confidence interval [CI]: 0.97–1.73), 1.44 (95% CI: 1.12–1.85), and 1.88 (95% CI: 1.29–2.73) in the DM+/SP-, DM-/SP+, and DM+/SP+ groups, respectively, after adjusting for covariates. The data showed the DM+/SP+ group had the highest risk of overall mortality (p -for-trend = 0.042). Cardiovascular mortality was increased, with HRs of 1.34 (95% CI: 0.79–2.25), 1.39 (95% CI: 0.82–2.36), and 1.98 (95% CI: 1.04–3.77) in the DM+/SP-, DM-/SP+ and DM+/SP+ groups, respectively, compared to DM-/SP- group (p -for-trend 0.037).

CONCLUSION

The coexistence of DM and sarcopenia synergistically increased the risk of all-cause and cardiovascular mortality. Individuals with either disease may require more careful management to prevent the development of the other disease to reduce mortality.

KEYWORDS

diabetes, sarcopenia, mortality

PP-D-10

EFFECTIVENESS OF A DIABETES ONE-STOP CLINIC FOR TYPE 2 DIABETES PATIENTS IN A TERTIARY CARE HOSPITAL IN THAILAND

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Jintanan Jangsiripornpakorn,¹ Phawinpon Chotwanvirat,¹ Nuttha Khunthupat,² Sumitra Chukaew¹

¹*Diabetes and Metabolic Care Center, Taksin Hospital, Bangkok, Thailand*

²*Taksin Hospital, Bangkok, Thailand*

INTRODUCTION

A multidisciplinary team approach is a strategy for optimizing care for patients with uncontrolled type 2 diabetes. However, the effectiveness of an integrated diabetes care team remains unclear.

METHODOLOGY

This study aims to evaluate the efficacy of a diabetes one-stop clinic, a multidisciplinary outpatient clinic that aims to provide integrated care for type 2 diabetes at Taksin Hospital. A multidisciplinary team, consisting of an endocrinologist, a certified nurse educator, a pharmacist, and a nutritionist, attended a weekly clinic at the Diabetes and Metabolic Care Center in Taksin Hospital. The integrated care team provides diabetes self-management and support, nutritional counseling, and diabetes management. To evaluate the change in their metabolic profile, a retrospective assessment of medical records for type 2 diabetes patients who visited a clinic between October 2021 and March 2022 and had HbA1c above 8%

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/m². 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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Yotsapon Thewjitcharoen, Kewalin Wattanawiroon, Siriwan Butadej, Soontaree Nakasatien, Thep Himathongkam

Diabetes and Thyroid Center, Theptarin Hospital, Bangkok, Thailand

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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Thitiporn Srisuk

Rajavithi Hospital, Rangsit Medical School, Bangkok, Thailand

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.