PP-D-07

CHANGES IN HbA1c AND ANTHROPOMETRY IN REAL-WORLD SETTINGS IN PATIENTS WITH TYPE 2 DIABETES RECEIVING GLP-1 RECEPTOR ANALOGUES (CHARGE AUDIT)

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INTRODUCTION

GLP-1 receptor analogue is a class of glucose-lowering agents with weight loss benefits. The magnitude of benefits may not be emulated in real-world settings compared to randomised controlled trials (RCT) due to strict inclusions and frequent follow-ups. This class of medication is costly and justification is required to support its usage. This study aims to look at real-world evidence of weight loss and HbA1c changes in patients started on GLP-1 receptor analogues.

METHODOLOGY

Patients were recruited from the Diabetes Clinic in a tertiary hospital. Inclusion criteria were patients with type 2 diabetes initiated on GLP1 receptor analogues in the year 2022. Data on anthropometry, body weight and HbA1c were captured retrospectively based on patients' clinic records and segregated into 3 monthly intervals. Data were analyzed using SPSS version 22.

RESULTS

The total number of patients recruited was 14; 12 receiving subcutaneous semaglutide and two on dulaglutide. Mean body weight reduction was higher among semaglutide recipients compared to dulaglutide at 3 months, 6 months and peaked at 9 months (semaglutide -10.4% vs dulaglutide -6.0%). HbA1c changes were highest at 3 months post initiation for semaglutide (10.2% reduction from baseline), plateaued at 6 months and increased close to baseline at 9 months. There was insufficient data for dulaglutide users.

CONCLUSION

In Malaysia, the cost-per-patient-per-month for GLP1 RA is about US \$110 and about US \$10 per-patient-month for SGLT2 inhibitors, in public hospital settings. Both GLP-1 receptor analogues showed weight loss benefits, with the effect seen greater in subcutaneous semaglutide users. This finding has been reproduced in other studies that have shown more weight loss effects when switching from dulaglutide to semaglutide. Moreover, the weight loss effect is continuous up to the 9th month for both drugs and did not plateau. Despite the further weight loss, the HbA1c effect was maximum at 3rd month and plateaued at 6 months onwards. Our study findings were comparable with other existing real-world evidence and RCTs, in line with the latest Malaysian guidelines in managing patients with type 2 diabetes and excessive weight. The limitations of this study were the small sample size and more subjects received semaglutide.

KEYWORDS

PP-D-08

THE EFFICACY OF TELEMONITORING AND INTEGRATED PERSONALIZED DIABETES MANAGEMENT (IPDM) IN PEOPLE WITH INSULIN-TREATED TYPE 2 DIABETES MELLITUS: A PRELIMINARY ANALYSIS

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INTRODUCTION

Integrated personalized diabetes management (iPDM) can improve glycemic control in people with diabetes. Emerging evidence suggests that telehealth can improve diabetes care. The purpose of this study was to assess the efficacy of diabetes care through a structured telehealth model of care.

METHODOLOGY

A 6-month single-center, open-labeled, prospective randomized controlled trial enrolled insulin-treated subjects with diabetes, aged 18-65 years old and A1c of 7.4-10.5%. All participants received standard diabetes education. The tele-iPDM group will connect their glucometer to the cloud-based telemonitoring platform and adjust insulin following a protocol by investigators weekly for 3 months (phase 1), then monthly for another 3 months (phase 2). The usual care group will receive standard diabetes care and record glucose data in the paper logbook. The primary outcome was a difference in A1c change from baseline between 2 groups at 12 and 24 weeks. Secondary outcomes included changes in FPG, BW, BMI, and the percentage of people with A1c 0.5% at 24 weeks, SMBG profiles and the number of hypoglycemic events.