



cortical hyperplasia. She was then subjected to a left adrenalectomy as she remained hypercortisolemic after the initial surgery. She went into remission after the bilateral adrenalectomy. At age 29, a surveillance scan showed a left solitary thyroid nodule and multiple bilateral breast lumps with a tissue biopsy suggestive of ductal adenoma. Excision of atrial myxoma was done at age 33 following the detection of cardiac myxoma from an echocardiogram when she complained of palpitations. Unfortunately, she was diagnosed with left breast carcinoma at age 38, requiring a left mastectomy. A recent tissue biopsy of a right breast lump showed intraductal papilloma.

### CONCLUSION

The diagnosis of CNC is often delayed owing to its rarity and complexity. Clinical and biochemical screening are the gold standard for the diagnosis of CNC. This patient requires a lifelong follow-up for the recurrence of cardiac myxoma and other associated manifestations of CNC.

# **EP\_A022**

ASSESSING THE POTENTIAL OF DULAGLUTIDE IN DE-INTENSIFICATION OF BACKGROUND ORAL GLUCOSE-LOWERING DRUG (OGLD) AND INSULIN THERAPY IN MALAYSIANS WITH TYPE 2 DIABETES MELLITUS

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### INTRODUCTION/BACKGROUND

Many Malaysian T2DM patients are on multiple glucoselowering drugs (i.e.  $\geq$ 2 OGLDs ± insulin). Dulaglutide, a once-weekly GLP-1RA, has been shown to significantly lower HbA1c levels in T2DM patients. However, there is a lack of real-world data to show the reduction of background treatment after patients start dulaglutide.

### METHODOLOGY

This study aims to assess the potential of dulaglutide in deintensifying background OGLDs and total daily dose (TDD) of insulin in T2DM patients in a real-world clinical setting. This is a retrospective study of 45 T2DM patients who initiated dulaglutide in 3 Ministry of Health (MOH) hospitalbased endocrinologist-led diabetes clinics conducted in Hospital Putrajaya, Hospital Selayang and Hospital Tuanku Ja'afar. The primary outcome was a change in OGLDs and insulin therapy at 6 and 12 months of dulaglutide therapy.

#### RESULTS

At baseline, 91% (n = 41) of patients were on  $\ge 2$  OGLDs, while 82% (n = 37) were on insulin therapy with a mean baseline TDD of 64 units. After 6 months of dulaglutide therapy, 18% (n = 8) of the patients had at least one of their OGLD doses reduced, 38% (n = 17) of patients were able to stop one OGLD, and 4% (n = 2) of patients were even able to stop two OGLDs. At 12 months, 22% (n = 10) of patients had at least one of their OGLD doses reduced, 40% (n = 18) of patients were able to stop one OGLD, 9% (n = 4) of patients were able to stop two OGLDs from baseline, 56% (n = 25) of insulin-treated patients on dulaglutide had a TDD reduction of 23 units (-36%) at 6 months and 19 units (-30%) at 12 months.

### CONCLUSION

Dulaglutide, with its once-weekly dosing, can effectively simplify patients' diabetes treatment by allowing the reduction of OGLDs and TDD of insulin. This de-intensification of medication could reduce the medication burden on patients and lessen the total drug cost for T2DM patients.

## EP\_A023

## ASSESSING THE REAL-WORLD EFFICACY OF DULAGLUTIDE IN MALAYSIAN MOH PATIENTS WITH TYPE 2 DIABETES MELLITUS

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### INTRODUCTION/BACKGROUND

An estimated 70% of Type 2 Diabetes Mellitus (T2DM) patients treated in Ministry of Health (MOH) hospitalbased diabetes clinics are still unable to achieve HbA1c targets despite combination glucose-lowering drugs. Moreover, more than 80% of these patients are overweight or obese. In Malaysia, dulaglutide, a once-weekly GLP-1RA, was approved in 2018 for use in patients with T2DM. Accessibility to GLP-1RA therapy is much limited in MOH hospitals.

### METHODOLOGY

This study aims to assess the glycaemic and weightlowering efficacy of dulaglutide at 6 and 12 months in T2DM patients treated in a real-world clinical setting. We conducted a retrospective study of 69 T2DM patients who initiated dulaglutide in 4 MOH endocrinologist-led



hospital-based diabetes clinics (Hospital Putrajaya, Hospital Selayang, Hospital Kuala Lumpur, and Hospital Tuanku Ja'afar). The primary outcome was HbA1c reduction at 6 months of dulaglutide therapy, while the secondary outcomes were HbA1c reduction at 12 months and weight loss at 6 and 12 months.

### RESULTS

In this study, the patients' mean baseline age, HbA1c and weight were 54 years old, 8.33% and 91.2 kg, respectively. The mean absolute reduction of HbA1c at 6 months was -0.93% and -0.87% at 12 months. The percentage of patients that achieved  $\geq 2\%$ , 1-2% and 0.5-<1% HbA1c reductions were 16%, 28% and 21% at 6 months, respectively, and 17%, 33% and 11%, at 12 months, respectively. For the secondary outcome analyses, patients experienced a mean weight loss of 3.73 kg at 6 months, and 4.83 kg at 12 months. The percentage of patients that achieved  $\geq 10$  kg, 5-10 kg and 1-<5 kg weight reductions at 6 months were 13%, 25%, and 34%, respectively; and at 12 months, 16%, 22% and 41%, respectively.

### CONCLUSION

Dulaglutide therapy was shown to be effective in reducing HbA1c and weight at 6 and 12 months of therapy in Malaysian patients with type 2 diabetes currently treated with at least two or more OGLDs, with or without insulin.

## EP\_A024

### MINIMED™ 780G ADVANCED HYBRID CLOSED-LOOP SYSTEM IN TYPE 1 DIABETES DURING RAMADAN: A SINGLE CENTRE EXPERIENCE

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### INTRODUCTION/BACKGROUND

The MiniMed<sup>™</sup> 780G automated insulin delivery system has improved outcomes for people with type 1 diabetes. In Putrajaya Hospital, most patients with type 1 diabetes fall in the high-risk category and are advised to avoid fasting during Ramadan, yet many still choose to observe it.

### METHODOLOGY

We aim to review the effectiveness and safety of the MiniMed<sup>™</sup> 780G use during Ramadan. We report a prospective observational, single-centre study of Type 1 diabetes patients using the MiniMed<sup>™</sup> 780G during Ramadan 2024. Four patients were selected and had

their CareLink personal data extracted before and during Ramadan to examine safety and glycemic metrics. Changes were made to their pump settings when necessary.

#### RESULTS

All patients were able to fast for more days with the MiniMed<sup>™</sup> 780G compared to previous years, with a mean of 13.5 days (8-20 days) on the pump vs 8.3 days (3-12 days) on basal-bolus insulin. All our patients demonstrated hyperglycemia after Iftar which needed 4-5 hours to resolve. Three of 4 patients developed hypoglycemia 1-4 hours before iftar requiring intervention. One patient developed one episode of severe hypoglycemia requiring hospitalization. No patients developed diabetic ketoacidosis. The average TIR was 72% before Ramadan and 70% during Ramadan.

### CONCLUSION

The MiniMed<sup>™</sup> 780 G increased the number of days of completion in fasting among our patients. However, incidences of hypoglycemia and hyperglycemia persisted requiring adjustments in the pump settings throughout Ramadan. This system allowed our patients to fast confidently and safely. Improvement in the outcome is to be expected with continuous experience in the future.

## EP\_A025

### RECURRENT HYPOGLYCEMIA IN A TEENAGER WITH OBESITY: A CASE REPORT

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### INTRODUCTION

Reactive hypoglycaemia is a condition of postprandial hypoglycemia occurring within 2 to 5 hours after meal intake. This condition is characterised by inappropriately increased blood insulin levels due to pancreatic overactivity to carbohydrates, most often refined sugars, thus producing hypoglycaemic symptoms. Recent studies have shown that the prevalence of T2D in obese children and adolescents is 0.18–7.9%, which is five times that in normal-weight individuals.

### CASE

This is a case of a 16-year-old female with a BMI of 34.28 kg/m<sup>2</sup> who presented with frequent symptoms of hypoglycaemia, mainly palpitations, sweating, giddiness and syncopal attacks since January 2023. The frequency of symptoms was noted 5 to 6 times per week, commonly occurring 4 hours post-meal and after strenuous activity.