CONCLUSION

Our findings imply that PwD already on SGLT2 inhibitors, those with better glycaemic control and milder proteinuria at baseline are more likely to persist with their GLP-1 RA therapy. Further research incorporating mixed-model analyses and patient perspectives is needed to elucidate the underlying reasons for these associations.

EP_A205

REASSESSING CARBIMAZOLE DOSING STRATEGIES: ASSOCIATION BETWEEN INITIAL DOSE AND SIX-WEEK THYROID FUNCTION

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Jazlan Jamaluddin,[1] Aiza Nur Izdihar Zainal Abidin,[2] Mohd Azzahi Mohamed Kamel,[3] Nik Aminah Nik Abdul Kadir,[4] Mohd Yusaini Mohd Yusri,[5] Nurfauzani Ibrahim,[6] Siti Nur Hidayah Abd Rahim,[7] Nur Athirah Rosli,[8] Nor Shazatul Salwana Din,[9] Nurainee Ibrahim[10]

[1]*Department of Primary Care Medicine, Faculty of Medicine, Universiti Malaya, Kuala Lumpur, Malaysia*
[2]*Department of Primary Care Medicine, Faculty of Medicine, Universiti Teknologi MARA, Selangor, Malaysia*
[3]*Klinik Kesihatan Lenggong, Perak, Malaysia*
[4]*Klinik Kesihatan Ijok, Selangor, Malaysia*
[5]*Klinik Kesihatan Seremban 2, Negeri Sembilan, Malaysia*
[6]*Klinik Kesihatan Jelebu, Negeri Sembilan, Malaysia*
[7]*Klinik Kesihatan Menggatal, Sabah, Malaysia*
[8]*Klinik Kesihatan Tanjung Karang, Selangor, Malaysia*
[9]*Klinik Kesihatan Kuala Selangor, Selangor, Malaysia*
[10]*Klinik Kesihatan Jawi-Jawi, Sabah, Malaysia*

INTRODUCTION

Carbimazole is a commonly used antithyroid medication for the treatment of hyperthyroidism. Dosage recommendations typically vary based on the severity of biochemical hyperthyroidism, particularly free thyroxine (FT4) levels. However, real-world dosing practices may deviate from guideline-based recommendations, potentially leading to suboptimal outcomes such as persistent hyperthyroidism or iatrogenic hypothyroidism. This study evaluates whether adherence to recommended dosing based on initial FT4 levels is associated with appropriate thyroid function outcomes at six weeks.

METHODOLOGY

We conducted a retrospective observational study involving 125 patients with confirmed hyperthyroidism. Patients were categorized based on whether their initial carbimazole dose was lower than, consistent with, or higher than the recommendations outlined in the American Thyroid Association guidelines, as determined by their initial FT4 levels. Thyroid function outcomes at 6 weeks were classified as euthyroid, hypothyroid, or persistent hyperthyroid based on repeat thyroid function tests. A chi-square test was performed to evaluate the association between dosing appropriateness and thyroid outcome.

RESULT

The mean age of participants was 48.9 years (SD = 15.0). Based on initial FT4 values, 23.2% were within 1–1.5× upper normal limit (UNL), 23.2% were 1.5–2× UNL, and 53.6% were >2× UNL. Among the 63 patients who received a correct dose, 58.6% became hypothyroid, and 35.0% became euthyroid. In contrast, 52.5% of those given a lower dose achieved euthyroidism, while only 17.2% became hypothyroid. Higher-than-recommended doses resulted in 24.1% hypothyroid outcomes. The chi-square test demonstrated a statistically significant association between dose category and thyroid outcome ($p = 0.003$).

CONCLUSION

Initial carbimazole dosing based on FT4 levels is significantly associated with short-term thyroid outcomes. Interestingly, lower-than-recommended doses were more likely to achieve euthyroidism without excessive hypothyroidism. These findings suggest the need to re-evaluate dosing strategies to optimize early treatment outcomes and reduce the risk of overtreatment in hyperthyroid patients.

EP_A206

A DESCRIPTIVE COST ANALYSIS OF HOSPITALISATIONS AT A DISTRICT HOSPITAL FOLLOWING INSULIN DISCONTINUATION

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Yi Jing Tan,[1] Soo Huan Puah,[2] Nur Iffah Illani Mohamed Rasidi,[2] Muhammad Faris Nazmi Mohammad Ibrahim,[2] Nur Syahiidah Mohamad Ikhiwan,[1] Suriani Majid,[3] Azyan Kamarudin,[3] Nur Amalina Ismail,[3] Siti Ratna Dewi Abdul Karim,[3] Nurul Nadiah Shaudin,[3] Poh Shean Wong[4]

[1]*Pharmacy Department, Hospital Jempol, Negeri Sembilan, Malaysia*
[2]*Medical Department, Hospital Jempol, Negeri Sembilan, Malaysia*
[3]*Pharmacy Department, Jempol District Health Office, Negeri Sembilan, Malaysia*
[4]*Endocrinology Unit, Medical Department, Hospital Tuanku Ampuan Najihah, Negeri Sembilan, Malaysia*

INTRODUCTION

A nationwide shortage of human insulin in Ministry of Health (MOH) facilities has forced primary care clinicians

to delay initiation, de-intensify, or temporarily discontinue insulin therapy in patients with Type 2 Diabetes (T2D), prioritising oral glucose-lowering drugs. Reduced insulin use may have compromised glycaemic control, increasing the risk of acute complications. This study aims to estimate the direct medical costs of hospitalisations for acute hyperglycaemic events in a district hospital.

METHODOLOGY

Adult patients admitted to Hospital Jempol with acute T2D complications – uncontrolled diabetes (UD), diabetic ketoacidosis (DKA), and hyperosmolar hyperglycaemic state – linked to insulin discontinuation from September 1, 2024, to February 28, 2025, were identified. An activity-based micro-costing approach was applied to quantify resource utilisation through medical records review. Cost components included ward stays, diagnostic procedures, laboratory investigations, pharmaceuticals, and consumables. Unit costs were sourced locally. Mean per-event costs were estimated for each complication type and expressed in 2025 Malayan Ringgits (RM).

RESULT

Twelve patients (mean age ± SD: 62.8±8.3) with hospitalisations temporally linked to insulin discontinuations were identified, including 10 UD and 2 DKA cases, with total costs of RM61,877. The median length of stay (LOS) for UD was 4 days (range: 1-11), and it was longer for DKA (6-11 days). The mean cost per UD admission was RM3,637 ± 2,200 (RM1,763-8,753), while DKA admissions were more costly (RM6,108-19,398). Higher costs are correlated with longer stays. Daily mean costs were RM918 (±309) for UD, and RM1,391±527 for DKA. Procedures and laboratory investigations were the largest cost drivers (62.3%), followed by ward stays (25.2%), and inpatient drugs/consumables (12.4%).

CONCLUSION

Inpatient management of acute hyperglycaemic events is resource intensive. This study provides unit cost estimates for UD and DKA admissions, which, when combined with nationwide LOS data, can assess the financial impact of the insulin shortage on the MOH.

EP_A207

CLINICAL CONSEQUENCES OF INSULIN DEPRESCRIBING IN TYPE 2 DIABETES: INSIGHTS FROM A DISTRICT HOSPITAL IN MALAYSIA

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Soo Huan Puah,[1] Nur Iffah Illani Mohamed Rasidi,[1] Yi Jing Tan,[2] Nur Syahiidah Mohamad Ikhiwan,[2] Muhammad Faris Nazmi Mohammad Ibrahim,[1] Poh Shean Wong[3]

[1]*Medical Department, Hospital Jempol, Negeri Sembilan, Malaysia*
[2]*Pharmacy Department, Hospital Jempol, Negeri Sembilan, Malaysia*
[3]*Endocrinology Unit, Medical Department, Hospital Tuanku Ampuan Najihah, Negeri Sembilan, Malaysia*

INTRODUCTION

Type 2 diabetes (T2D) is characterised by insulin resistance and progressive beta-cell dysfunction, leading to failure on oral glucose-lowering drugs (OGLDs). Insulin deprescribing requires individualisation, considering factors like residual beta-cell function, disease duration and insulin dosage. This study explores the characteristics and outcomes of patients with T2D who had insulin deprescribed at a local health clinic before hospitalisation.

METHODOLOGY

We performed a retrospective medical records review involving adult patients with T2D admitted to Hospital Jempol from September 2024 to April 2025. These patients had their insulin deprescribed within 12 months prior to admission. Basic demographics, Charlson Comorbidity Index (CCI), baseline HbA1c, admission random blood glucose (RBS), interval from insulin discontinuation to admission, length of stay (LOS) in the ward, insulin deprescribing success (OGLDs maintained at discharge) and factors favoring deprescribing were explored.

RESULT

Among 14 patients with a median age of 62.6 years (range: 41-78), 85.7% had a CCI ≥3. All had OGLDs with insulin (basal bolus 71.4% or premixed 28.6%), with median total daily dose (TDD) of 57 units (range: 28-98) pre-admission. Duration of insulin discontinuation to admission was 3-31weeks. Median baseline HbA1c was 11.5% (range: 6.4-14%), while median admission RBS was 19.6mmol/L (range: 6.8 – 31 mmol/L). Infections accounted for 57% of them, in which 5 were complicated (2 DKA, 1 respiratory failure, 1 gram-negative bacteremia, 1 septic shock and intubated). Other indications for admission included symptomatic hyperglycemia (28.6%), decompensated heart failure (7.1%), and hypertensive emergency (7.1%). The