

OA-D-13

HYPOGLYCEMIA ASSESSMENT AMONG TYPE 2 PATIENTS WITH DIABETES RECEIVING INSULIN BASALOG AND INSULIN LANTUS: A CROSSOVER RANDOMIZED CONTROLLED TRIAL USING CONTINUOUS GLUCOSE MONITORING SYSTEM (CGMS)

<https://doi.org/10.15605/jafes.034.02.S31>

Ida Ilyani Adam, Norlaila Mustafa, Norasyikin Abdul Wahab, Nor Akhmar Ibrahim, Pravina Deligannu

Hospital Kuala Lumpur, Malaysia

INTRODUCTION

Hypoglycemia is a major limiting factor among insulin-treated patients in achieving optimal glycemic control. Analogue and biosimilar insulins have been shown to produce reductions in the hypoglycemia rates, however the actual assessment of hypoglycemia comparing insulin Lantus and the biosimilar insulin Basalog has not been described before.

OBJECTIVE

To evaluate hypoglycemia rates amongst T2DM patients receiving Basalog vs Lantus using continuous glucose monitoring (CGM).

METHODOLOGY

A single centre, randomized, open-label, crossover study was conducted over a 12-week period among T2DM patients (n=55), randomised into two-arm parallel group; Basalog and Lantus. Hypoglycemia was described by evaluating Low Blood Glucose Index (LBGI), M-value and Standard Deviation (SD) from CGM. Independent and paired sample t-test and one-way ANCOVA was performed using SPSS.

RESULTS

The respondents in Basalog (n=27) and Lantus (n=28) arm were similar in socio-demographics, duration of DM, complications of DM, comorbidities, use of oral hypoglycaemic agents, antihypertensive medications and lipid lowering drugs ($p>0.05$). No difference in anthropometrics, vital signs, lipid profile, renal profile, full blood count, liver function and urine microalbumin was found between the groups ($p>0.05$). Mean HbA1c was 8.8% and 8.7% with Glargine and Basalog, at baseline respectively. Both insulins had no significant differences in SD (2.7 ± 0.99 vs 2.5 ± 0.93 , $p>0.05$) and M value (15.9 ± 18.11 vs 14.9 ± 25.01 , $p>0.05$). There was lesser low CGM excursions (LBGI) for Basalog compared to Lantus (2.3 ± 3.37 vs 3.4 ± 4.90 , $p=0.107$).

CONCLUSION

With lesser low glycemic excursions, Basalog may be a feasible alternative basal insulin as compared to Lantus in Type 2 patients with diabetes.

KEY WORDS

diabetes mellitus, type 2, hypoglycemia, Lantus, Basalog, CGM

OA-D-14

IMPLEMENTATION OF DIABETES ONE-STOP CENTRE (DOSC) IN A TERTIARY HOSPITAL IN CENTRAL PAHANG, MALAYSIA: SUCCESS, FAILURES AND LIMITATIONS

<https://doi.org/10.15605/jafes.034.02.S32>

Chee Keong See, Hui Wenn Chin, Dorothy Maria Anthony Bernard, Azharni Aysha Semah Abu Bakar, Yuhin Asadulhaq Yusoff, Hema Lata Veerasamy, Suzatul Fadzillah Dawi, Noorhidayah Arifin, Xin-Yi Ooi

Hospital Sultan Haji Ahmad Shah, Temerloh, Pahang, Malaysia

INTRODUCTION

A comprehensive diabetes management currently focuses on ensuring patient self-management. To achieve this goal, a cohesive management team that includes physicians, diabetes educators, pharmacist, dietician, physiotherapist and podiatrist is required. Implementation of a DOSC provides an ideal avenue for patients to receive a holistic assessment. DOSC was implemented in Hospital Sultan Haji Ahmad Shah, a Malaysian tertiary hospital in central Pahang since 2015. DOSC was an ideal concept for patient assessment since this hospital had wide area of patient coverage. This study aimed to assess the impact of DOSC implementation on diabetes outcomes such as HbA1c control, diabetes complications, mortality and clinic defaulter.

METHODOLOGY

This is a cross-sectional study assessing patients who were recruited into DOSC between 2015 and 2017. Baseline data and follow-up were collected through patient information system. Information included: demographics, HbA1c, diabetes complications, mortality and 2018 latest follow-up data.