PP-D-47

SUCCESSFUL USE OF SUBCUTANEOUS CONTINUOUS GLUCOSE MONITORING (CGM) IN A DIABETIC PATIENT WITH ACUTE CORONARY SYNDROME (ACS) UNDERGOING CORONARY ARTERY BYPASS GRAFT (CABG) SURGERY: A CASE REPORT

https://doi.org/10.15605/jafes.038.AFES.116

Charmia Kim Balansag and Jeremyjones Robles
Chong Hua Hospital, Cebu City, Philippines

CASE

Type 2 diabetes mellitus patients undergoing CABG for multi-vessel coronary artery disease (CAD) have a prevalence of greater than 30%. Previous trials demonstrated that subcutaneous CGM is less reliable in cardiac surgeries related to electrocautery interference, signal loss, and hypoperfusion.

We present a case of a 59-year-old Filipino male, hypertensive, with poorly controlled diabetes, admitted for chest pain and was managed as ACS Non—ST-segment Elevation Myocardial Infarction (NSTEMI). The coronary angiogram showed CAD-3 vessel disease (99% occlusion left anterior descending artery). FreeStyle Libre (FSL) subcutaneous sensor was attached prior to CABG. Insulin intravenous infusion was started. CGM measured glucose levels completely without signal loss in the peri-operative phases within the target blood glucose in the ICU (90-180 mg/dl (time in the range [TIR]: within 100%, above 0%, below 0%). The patient was discharged and improved on the eighth postoperative day.

CGM subcutaneous devices are capable of intensive glucose monitoring during major cardiac surgery while reducing workload. Investigations with larger patient numbers are needed.

KEYWORDS

subcutaneous CGM, CABG, type 2 diabetes, peri-operative glucose, cardiac surgery

PP-D-48

HIGH STRESS HYPERGLYCEMIA RATIO VERSUS ABSOLUTE HYPERGLYCEMIA AS PREDICTOR OF POOR OUTCOME AMONG PATIENTS WITH TYPE 2 DIABETES MELLITUS AND MODERATE TO CRITICAL COVID-19 INFECTION ADMITTED AT UNIVERSITY OF SANTO TOMAS HOSPITAL FROM 2020-2021: A RETROSPECTIVE STUDY

https://doi.org/10.15605/jafes.038.AFES.117

Mary Kenette Bello, Elaine Cunanan, Erick Mendoza, John Paul Martin Bagos
University of Santo Tomas, Manila, Philippines

INTRODUCTION

Patients with diabetes are vulnerable and highly susceptible to contracting COVID-19. Stress Hyperglycemia Ratio (SHR) may provide prognostic information in hospitalized patients. It is debatable whether stress hyperglycemia directly leads to poor outcomes or is simply a marker of increased stress and inflammation. This study investigates whether high SHR is associated with poor clinical outcomes among patients with Type 2 Diabetes Mellitus (T2DM) and moderate to critical COVID-19 infection. Moreover, this study aims to compare high SHR versus absolute hyperglycemia as a predictor of poor outcomes.

METHODOLOGY

A retrospective chart review involving 146 patients with moderate to critical COVID-19 and T2DM was done from March 2020 to December 2021. To determine the SHR level associated with in-hospital mortality, the area under the receiver operating curve was initially conducted to categorize SHR into low and high levels.

RESULTS

The association of high SHR levels and absolute hyperglycemia with the outcomes (Hypoxemia SpO2 1.082) is associated with poorer outcomes, increased invasive mechanical ventilatory support likelihood, and increased mortality.

CONCLUSION

The results demonstrated that High SHR could be a better prognostic marker than absolute hyperglycemia.

KEYWORDS

stress hyperglycemia ratio, absolute hyperglycemia, type 2 diabetes mellitus, COVID-19, poor outcome