World Academy of Science, Engineering and Technology
International Journal of Medical and Health Sciences
Vol:12, No:12, 2018

Exploring the Safety of Sodium Glucose Co-Transporter-2 Inhibitors at the Imperial College London Diabetes Centre, UAE

Authors : Raad Nari, Maura Moriaty, Maha T. Barakat

Abstract : Introduction: Sodium-glucose co-transporter-2 (SGLT2) inhibitors are a new class of oral anti-diabetic drugs with a unique mechanism of action. They are used to improve glycaemic control in adults with type 2 diabetes by enhancing urinary glucose excretion. In the UAE, there has been certainly an increased use of these medications. As with any new medication, there are safety considerations related to their use in patients with type two diabetes. A retrospective study was conducted at the three main centres of the Imperial College London Diabetes Centre. Methodology: All patients in electronic database (Diamond) from October 2014 to October 2017 were included with a minimum of six months usage of sodium glucose co-transporter inhibitors that comprise canagliflozin, dapagliflozin and empagliflozin. There were 15 paired sample biochemical and clinical correlations. The analysis was done at the start of the study, three months and six months apart. SPSS version 24 was used for this study. Conclusion: This study of sodium glucose co-transporter-2 inhibitors used showed significant reductions in weight, glycated haemoglobin A1C, systolic and diastolic blood pressures. As the case with systematic reviews, there were similar changes in liver enzymes, raised total cholesterol, low density lipopoptein and high density lipoprotein. There was slight improvement in estimated glomerular filtration rate too. Our analysis also showed that they increased in the incidence of urinary tract symptoms and incidence of urinary tract infections.

Keywords : SGLT2 inhibitors dapagliflozin empagliflozin canagliflozin, adverse effects, amputation diabetic ketoacidosis DKA, urinary tract infection

Conference Title : ICESDHMD 2018 : International Conference on Endocrine System Diseases, Hormonal and Metabolic Disorders

Conference Location : Bangkok, Thailand

Conference Dates : December 13-14, 2018