

Evaluation of clinical practice regarding SGLT 2 inhibitor use in patients with Type 2 Diabetes Mellitus and established coronary artery disease in James Cook University Hospital

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Introduction

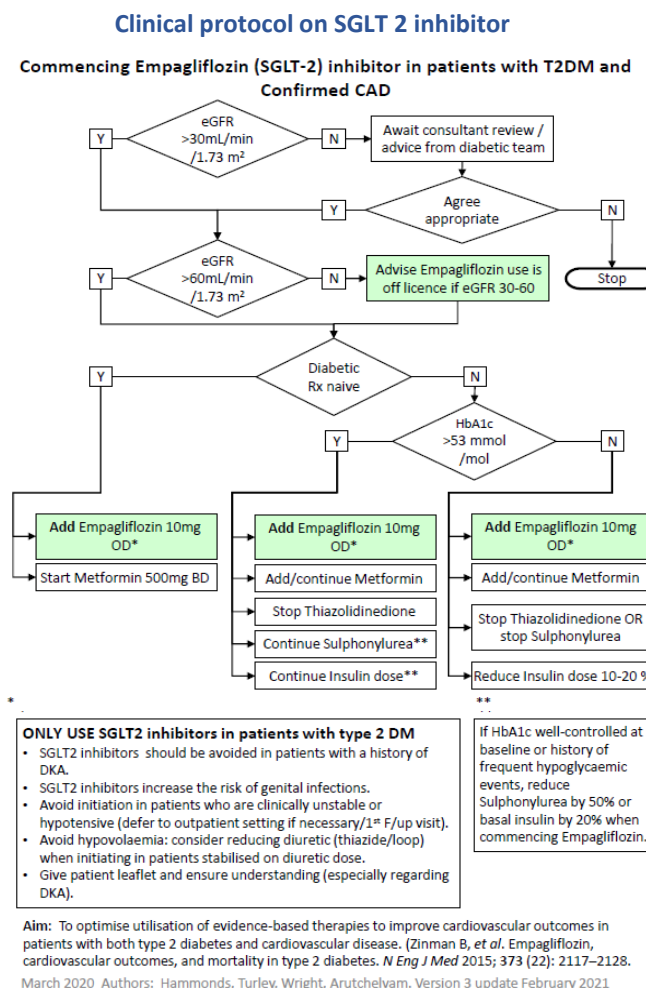
- Type 2 diabetes mellitus (T2DM) is a significant risk factor for coronary artery disease (CAD).
- The landmark EMPA-REG trial demonstrated that SGLT2 inhibition significantly decreased the risk of all cause mortality (NNT 39 at 3.1yrs) in patients with T2DM and CAD.¹
- In a previous audit, we showed that 6 out of 259 (2.3%) diabetic patients were prescribed with gliflozin on discharge.
- A clinical protocol on SGLT2 inhibitor commencement has been in place at JCUH coronary care unit for all T2DM patients who presents with an ACS (STEMI and NSTEMI).

Objective

- To evaluate if T2DM patients admitted with acute coronary syndromes (ACS) are commenced on SGLT2 inhibitor prior to hospital discharge.

Methods

- Data was collected retrospectively from the validated Myocardial Ischaemia National Audit Project (MINAP) database for the months of August and September 2020.
- HbA1c and eGFR results were gathered from hospital electronic biochemistry database.
- Diabetic medication was recorded from British Cardiovascular Interventional Society (BCIS) discharge letter.
- 2 T2DM patients were deceased during admission and therefore excluded



Conclusion

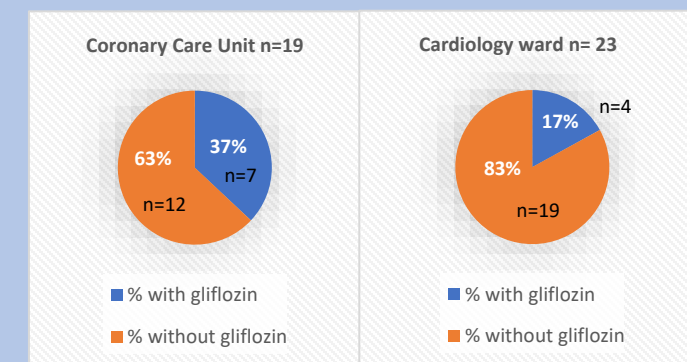
SGLT 2 inhibitor is proven to have mortality benefits in patients with CAD and T2DM. Our clinical protocol was effective in increasing numbers of patients discharged on a SGLT 2 inhibitor. To improve this further, we have instigated cardiologist specialist nurses prescribing of SGLT 2 inhibitor into daily practice. In addition, we had enforced SGLT 2 inhibitor pathway during junior doctors and CCU nurses meeting. We aim to re-audit after one year

Reference

- Empagliflozin, Cardiovascular Outcomes, and Mortality in Type 2 Diabetes. Zinman B, Wanner C, Lachin JM, Fitchett D, Bluhmki E, Hantel S, Mattheus M, Devins T, Johansen OE, Woerle HJ, Broedl UC, Inzucchi SE; EMPA-REG OUTCOME Investigators. *N Engl J Med.* 2015 Nov 26;373(22):2117-28. doi: 10.1056/NEJMoa1504720. Epub 2015 Sep 1

Results

Admission route	CCU	Ward
Total number	19 patients	23 patients
HbA1C>53mmol	12	18
eGFR>30	17	23



- Total of 155 ACS patients were admitted between August and September 2020.
- 42 (27%) T2DM patients admitted with acute coronary syndrome and subsequently discharged were audited.
- In this re-audit, 11 out of 42 (26%) T2DM patients were prescribed with a gliflozin on discharge.
- Patients were divided between ward areas – CCU versus ward admission.
- CCU group had a higher percentage of patients, 37%, prescribed an SGLT2 inhibitor
- 17% of patients prescribed an SGLT 2 inhibitor in the cardiology ward category.