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Discontinuation of SGLT2 inhibitors in people with type 2 diabetes following hospitalisation for heart failure: a cause for concern?

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Abstract

Background: After a hospitalisation for heart failure (HF), continuation of sodium-glucose cotransporter 2 inhibitors (SGLT2i) should be a priority. Hence, we examined SGLT2i use following discharge amongst SGLT2i users with type 2 diabetes who were hospitalised for HF.

Methods: We used data from the Medicines Intelligence (MedIntel) Data Platform. We identified all adults discharged from hospitals during 2017-2020 with a principal diagnosis of HF, and type 2 diabetes with ≥ 1 SGLT2i dispensing in the 3 months prior to hospitalisation. For people with multiple hospitalisations, we considered only the most recent hospitalisation. We examined SGLT2i dispensing in the 90 and 365 days following hospitalisation. We examined SGLT2i discontinuation (no dispensing in the time period) by patient characteristics.

Results: We found 28% and 23% of people had not filled a SGLT2i prescription in the 90 and 365 days following hospital discharge, respectively, with people in older age groups having an increased discontinuation rate. Receiving an intervention during hospitalisation or duration of prior SGLT2i use did not impact discontinuation rates. A longer length of stay, greater number of hospitalisations in the year prior, and a diagnosis of chronic kidney disease were associated with greater SGLT2i discontinuation rates.

Conclusions: We found a high rate of SGLT2i discontinuation following hospitalisation of HF amongst people with type 2 diabetes. This is very concerning given the HF benefits of SGLT2i, and raises questions whether hospitalisation is an event linked to discontinuation of these critical medicines. Greater research is needed into this topic including potential reasons for discontinuation.

Impact: Greater work is needed to minimise SGLT2i discontinuation following a hospitalisation for HF given the mortality and HF benefits of continuation. Our findings also highlight the need to assess the risks and benefits of withholding SGLT2i during hospitalisation given the potential for inadvertent discontinuation on discharge.