

Medicines Optimisation intervention brief

TITLE?

Diabetes and the use of SGLT2 inhibitors (SGLT2i's) during the COVID-19 pandemic **WHAT?**

• Urgent safety notice about sick day rules in diabetes and use of SGLT2i's (aka 'gliflozins'). WHY?

- Patients with diabetes admitted with COVID-19 symptoms are at higher risk of diabetic ketoacidosis (DKA) than with other infections.
- Individuals with type 1 diabetes (T1DM) who use adjunctive SGLT2i's for control alongside their insulin are at particularly high risk during intercurrent illness.
- Treatment of people who have insulin deficiency with SGLT2i's is known to be associated with DKA and this can occur with normal or near normal blood glucose levels.
- DKA occurring in people with COVID-19 is particularly hazardous to treat because of the challenges around pulmonary fluid accumulation secondary to the high volume fluids required.

WHO?

• All patients with diabetes or pre-diabetes prescribed SGLT2i's

HOW?

- 1. Identify people taking SGLT2 inhibitors in your practice (EMIS Web searches provided)
 - a. SGLT2i and T1DM
 - b. SGLT2i and T2DM on insulin with a history of ketosis
 - c. SGLT2i and T2DM
- 2. Advise T1DM to stop taking SGLT2i. Should be under consultant supervision and may already have been contacted by the diabetes service.
- 3. Advise T2DM taking insulin and SGLT2i with a history of DKA to stop taking SGLT2i
- 4. For all others, reinforce the sick day rules which now include **suspension** of SGLT2i. NB. Suitable wording for text message attached
- 5. Ensure anyone stopping SGLT2i is able to test their blood glucose. (People using insulin and SGLT2i should also be able to test for ketones).
- 6. Remember to check for ketosis in any patient who is acutely unwell and taking SGLT2i, whatever their blood glucose.

TIPS

- T1DM: STOP SGLT2i immediately (even if well) & rely on higher dose insulin short intermediate term.
- T2DM:
 - $\circ~$ treated with insulin but previously experienced DKA during illness STOP~SGLT2i immediately.
 - treated with oral agents can CONTINUE SGLT2i if well but STOP immediately if develop COVID-related symptoms. (note: SGLT2i can be restarted once assessed and recuperative i.e. symptom-free for 7 days).
- Anyone stopping SGLT2i must be able to monitor blood glucose, and be given advice re worsening glycaemic control.
- People stopping treatment during illness will also need to STOP metformin and ACE inhibitors.
- Insulin treatment may be needed in the short term. Consult community diabetes service (0300

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003 0120) if necessary.

• People without diabetes (or with pre-diabetes) taking SGLT2i as cardiovascular risk reduction strategy should be informed immediately of potential concerns and advice given to stop therapy (even if well) or ideally liaise with the heart failure team who can then have informed discussion with individual patient

SO WHAT?

No patient admitted to hospital with COVID-related symptoms should be taking SGLT2i FURTHER INFORMATION

 Consensus advice from Dr Richard Cribbs WHCCG GP Diabetes Lead (approved by WHCCG Community Diabetes Service and diabetes specialists at HHFT) – summarised above

Urgent Safety Notice SGLT2s.docx

- 2. WISDOM newsletter contains important advice and links about sick day rules. Links to the updated versions are below:
 - a. <u>https://trend-uk.org/wp-content/uploads/2020/03/A5_T1IIIness_TREND_FINAL.pdf</u>
 - b. <u>https://trend-uk.org/wp-content/uploads/2020/03/A5_T2IIIness_TREND_FINAL.pdf</u>
 - c. <u>https://trend-uk.org/wp-content/uploads/2019/04/A5_DKA_2019_TREND.pdf</u>
 - d. <u>https://www.diabetes.org.uk/about_us/news/coronavirus</u>
- 3. Suggested wording (from Dr Cribb) for message to patients with T2DM (e.g. MJog):

You are getting this message because you have been prescribed a medicine called dapagliflozin, canagliflozin or empagliflozin. It has been noticed that for people who become unwell, particularly with COVID-19, these medicines can cause additional problems. IF you become unwell with a high temperature or difficulty breathing please stop taking these drugs and contact your doctor. You SHOULD NOT stop taking them provided that you remain well. They do NOT increase your chance of catching COVID-19. Advice for looking after your diabetes when unwell is available from Trend on line at https://trend-uk.org/wp-content/uploads/2020/03/A5_T2IIIness_TREND_FINAL.pdf

Or shortened version for practices using AccuRx:

You are getting this message because your medicines include dapagliflozin*, (canagliflozin* or empagliflozin*) *delete as appropriate. If you become unwell, particularly with COVID-19, this medicine could cause extra problems. IF you become unwell with fever or difficulty breathing, STOP taking it and contact your doctor. DO NOT STOP taking it if you remain well. This medicine does NOT increase your chance of catching COVID-19. Further advice: <u>https://trend-uk.org/wp-</u> content/uploads/2020/03/A5 T2llIness TREND FINAL.pdf



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