

Patient Information Leaflet

SGLT2 inhibitors and Heart Failure: Information for patients, relatives, and carers

Introduction

This leaflet has been designed to give you information about sodium glucose co-transporter-2 inhibitors (SGLT2i) and answers some of the questions that you, or those who care for you, may have about these medicines. It is not meant to replace the discussion between you and your medical team but aims to help you understand more about what is discussed. If you have any questions about the information below, please contact your doctor, pharmacist or heart failure team.

What are SGLT2 Inhibitors?

These medications increase the amount of sugar in the urine. As a result, they also **increase the amount of urine (water) you pass**. They are commonly prescribed in patients with type 2 diabetes; however, they have added benefits including **protecting the kidneys** and heart, **reducing the risk of heart failure**, heart attacks and strokes in individuals at most risk.

Dapagliflozin (Forxiga[®]) and Empagliflozin (Jardiance[®]) have now been approved by the National Institute for Health and Care Excellence (NICE) for use in patients with symptomatic heart failure due to a weak pump function. They can be prescribed for patients **with and without** type 2 diabetes.

Are there any side effects?

As with all medications, side effects can occur. The majority of these can be dealt with without need to stop your medication. Some side effects of SGLT2i can occur in all patients, whilst others only occur in those who also have type 2 diabetes.

If you are concerned about any potential side effects or symptoms, please contact your heart failure specialist (see contact details below) or your GP.

Common:

- **Fungal genital infections (e.g. thrush)** – As these medicines increase the sugar in your urine, there is an increased risk of infection, such as thrush, around the genitals. Maintaining good levels of hygiene and avoidance of tight-fitting underwear reduces the risk of infection. Infections are easily treated. You should consult your pharmacist if irritation or itching occurs in these areas. If symptoms are recurrent, please discuss with your heart failure team.
- **Rash**
- **Dizziness**
- **Hypoglycaemia (low blood glucose)** – this usually occurs if SGLT2 inhibitors are used in combination with other diabetes medicines. Your heart failure and diabetes teams will advise you on any necessary changes to your diabetic medication.

Uncommon:

- **Dehydration** – These medicines increase your urine volume so may cause dehydration. Signs of dehydration include a dry mouth, feeling thirsty and a fast heartbeat. To prevent dehydration drink fluids if you develop these symptoms.

Rare:

- **An increase of acid in the blood** – SGLT2 inhibitors may cause certain acids (ketones) to build up in the blood. This is called **diabetic ketoacidosis (DKA)**. This is a rare event but can happen **even when your blood glucose is normal**. Symptoms include nausea and vomiting, abdominal pain, rapid breathing, and dehydration e.g. dizziness and thirst.

The risk of DKA is increased if you do not eat for long periods, become dehydrated, reduce your insulin dose too quickly, drink excessive alcohol or are unwell. **Please seek medical advice before starting any new diet** particularly very low carbohydrate diets (also called ketogenic diets) as these can increase the ketones in the blood.

Very rare:

- **Fournier's gangrene** - Fournier's gangrene is a rare, life-threatening bacterial infection of your scrotum, penis or perineum (the area between your genitals and rectum). It's an infection that worsens quickly and requires emergency care. Go to the emergency department if your genitals or perineum are red, tender, or swollen, and you have either a fever or you feel unwell in general.

Sick day guidance:

Should I stop taking these tablets if I become unwell?

If you are unwell (i.e. too unwell to go to work or carry out normal daily activities) and **especially if you have vomiting, diarrhoea, or fever**, you should **temporarily stop** taking this medicine. You can restart them when you are better. If you remain unwell after 48 hours seek medical advice from your GP, Pharmacist, NHS 111 or Heart Failure Specialist Nurse. If you have diabetes, you must increase the number of times you check your blood glucose levels. If they run too high or low, please seek medical advice.

For further advice please contact your community pharmacist, GP, or heart failure team. If you are acutely unwell and need urgent medical attention, please contact [NHS 111](https://www.nhs.uk), or attend your local Emergency department.

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