

Diabetic Ketoacidosis (DKA)

What is DKA?

DKA occurs when your body has a severe lack of insulin. This leaves the body unable to use glucose to produce energy. The body then tries to use other sources of energy instead. This releases acids which can build up in the body and become harmful.

Signs and symptoms

- Frequently passing water (urinating)
- Thirst
- Blurry vision
- Feeling sick, being sick or having stomach pain
- Fast and deep breathing
- Sleepiness
- Unconsciousness
- Sweet smelling breath, a sweet/metallic taste in the mouth, or a different odour to urine or sweat

How to reduce the risk of DKA

- Avoid extreme diets or restricting food-groups
- Make sure you drink enough (aim for 2 litres of non-alcoholic drinks per day)
- Avoid making sudden changes to your insulin regime
- Cut back or stop drinking alcohol

What should I do if I have symptoms of DKA?

Seek immediate medical help. Inform the doctors and nurses that you have diabetes and provide them with a list of medications you take.

Urinary tract or kidney infection

What is a urinary tract infection (UTI)?

A UTI is an infection in your bladder. It is sometimes called a 'water infection'.

A kidney infection is when you have an infection in your kidneys. Sometimes they can occur when a UTI has not been treated.

Signs and symptoms

The symptoms of UTI and kidney infection can be very similar and overlap. Below is a guide to the most common symptoms:

UTI	Kidney infection
Pain on urination (passing water)	High temperature
Frequent urination (passing water)	Shivering or chills
Stomach pain	Loss of appetite
Smelly urine	Feeling sick

How to reduce the risk of getting UTI and kidney infection

- Stay well hydrated (aim for 2 litres of fluid/day)
- Treat constipation promptly
- Practice good toilet hygiene

What should I do if I have symptoms of a UTI or a kidney infection?

If you do think you have a UTI you should see your GP.

Increased risk of foot /circulation problems

What are foot and circulation problems?

Patients with diabetes are at a greater risk of developing circulation problems with their feet. There may be an increased risk if you take SGLT-2 inhibitors.

Signs and symptoms

One foot or both feet could be affected

- If an area of your foot is red, warm or swollen
- Broken skin
- Discharge or oozing
- Feeling generally unwell

How can I decrease my risk of developing foot problems?

- Check your feet daily – look out for redness, pain, changes in shape or anything unusual
- Have a regular foot check with a podiatrist. The podiatry booking office can be contacted on 0191 569 9693.
- Look after your toenails
- Moisturise your feet
- Check shoes for sharp objects before putting them on
- Be aware of any loss of sensation in your feet
- Avoid footwear or socks that are too tight or restrict your circulation
- Don't be self conscious about your feet – get them checked!

Who should I contact if I have these signs?

Contact your GP or Foot Protection Service immediately. If they are not available and there is no sign of healing after one day, go to your nearest out-of-hours healthcare service or A&E department



Important information about your medicine: dapagliflozin, canagliflozin or empagliflozin

What are these medicines?

Dapagliflozin, canagliflozin and empagliflozin belong to a group of medicines called SGLT-2 inhibitors. SGLT-2 inhibitors are tablets used in the treatment of type 2 diabetes.

They work by:

- Reducing the amount of glucose being reabsorbed into the body by the kidneys so that it is passed out in the urine instead
- This reduces the amount of glucose in your blood

New advice about serious side effects

Recently, there have been reports that these medicines can cause some rare but serious side effects. These are:

- Diabetic ketoacidosis (DKA) - a serious condition where acids build up in your body
- Serious urinary tract (water) infections and kidney infections
- An increased chance of foot and circulation problems

How common are these side effects?

These side effects are rare.

It is possible for anyone to develop any of the conditions at any time. However, patients who take SGLT-2 inhibitors are at increased risk. If you do get these side effects it is important to know what to do.

How do I know if I am taking an SGLT2 inhibitor?

The table below shows the generic name and the brand name of these medicines.

Drug name	Brand name
Dapagliflozin	Forxiga
Canagliflozin	Invokana
Empagliflozin	Jardiance

You may find it useful to write down the name of the SGLT2 inhibitor you take, and the names of any other medications you take, and take this list to any appointments.

Turn over for more information on each of the serious side effects and how to reduce the risk of experiencing them.

For more information on each condition, visit: www.nhs.uk

Useful contacts:

Name	Contact details
NHS choices	www.nhs.uk
Diabetes UK	www.diabetes.org.uk