

Acute Kidney Injury

What is the function of the kidneys?

Most people are born with two kidneys, one on either side at the back of the abdomen. They are wrapped in a thick layer of protective fat. Kidneys are important for cleaning the blood of excess salts and acid. They also get rid of some waste products and they balance fluid levels in the body. Kidneys help us to maintain bone health and normal blood pressure. Kidneys produce urine as a result of all these processes

What is Acute Kidney Injury?

Acute kidney injury is the newer name for what used to be called acute renal failure. It means that the kidneys are not working as well as they were, and that this has happened quite suddenly. It can happen over a period of hours, days or perhaps weeks. It does not mean that the kidneys have suffered a physical blow.



What are the symptoms of acute kidney injury?

Some patients do not experience any symptoms at first to tell them that their kidneys are not working properly. For these people, the problem is usually diagnosed from blood tests done at the GP surgery or at the hospital.

Some people do experience symptoms to suggest that their kidneys are not working properly:

- They might not pass as much urine ('water', or 'pee') as usual when they go to the toilet, even if they drink more fluids. Some people suddenly can't make any urine at all.
- Their urine might be very concentrated. Urine can look yellow, brown, or even red in colour.
- Their feet and legs might swell up, especially if they have been standing or sitting for a while.

If the kidney injury doesn't get better quickly, the waste products can build up in the body. If this happens to you, you might start to feel sick, tired, drowsy and confused and you might develop itchy skin.

What causes this problem?

Acute kidney injury might happen as a result of an infection, severe dehydration, or very low blood pressure as a result of sudden illness. It can also occur from a blockage of the ureter tubes that drain the kidney to the bladder, or the urethra that drains the bladder to outside of the body.

Some medicines, especially if taken while unwell, can also cause acute kidney injury. There are also some rare conditions that can cause kidney disease directly.

Acute kidney injury is more common in older people, although it can happen at any age. It is also more likely to happen to people who have existing kidney problems, which are more common if you have diabetes, heart failure or liver disease.

How can acute kidney injury be treated?

If you are unwell or if the acute kidney injury is severe, your GP will arrange urgent admission to hospital to investigate this. If you are already in hospital when the acute kidney injury is diagnosed, the doctors looking after you will discuss further tests and management with you.



Most people who are already in hospital will still be cared for by their usual medical or surgical doctors on the ward until they are discharged from hospital.

Some people will need to have an ultrasound scan of the kidneys. This is not painful. Sometimes the scan will show what is causing the kidney injury. If there is blockage to the tubes draining the kidney or the bladder, patients will need to see a urologist (a surgeon who operates on the renal tract, which includes the kidneys, the bladder, the ureters and the urethra).

People with rare but serious kidney injury might need to be seen by specialist kidney doctors (nephrologists). In some cases, kidneys do not recover quickly enough. If this happens, it might be necessary to have dialysis to clean the blood and help remove waste products. Further information will be shared and there will be opportunity for discussion.

People who have acute kidney injury will have any medicines they are taking reviewed by a pharmacist and a doctor. Some regular medicines might be stopped altogether, or for a while, until the kidneys recover.

What can I do to look after my kidneys?

If you have had acute kidney injury you are at risk of getting it again. To avoid this, you may be advised to stop some medicines if you become unwell and dehydrated. You will be given extra information about this if you are taking these medicines. These are usually blood pressure medications that work through their action on the kidneys (medicines with names ending in 'pril' or 'sartan') or diuretics (often called 'water tablets') that make you pass more urine. If you are on any of these medicines, you can ask your own doctor or hospital specialist, or your pharmacist for more information.

It is also recommended that before taking medicines such as anti-inflammatory pain killers (examples include ibuprofen, diclofenac, naproxen) you discuss this with your own doctor, as these can cause damage to your kidneys.

Most people's kidneys get better quickly and recover fully after an episode of acute kidney injury. However, you will need to look after your kidneys and make sure you stay well hydrated. You should always tell health care professionals (doctors and nurses) treating you that this has happened to you.

Who do I contact when I am at home?

Your own doctor (GP) will be informed that you have had an acute kidney injury but it is worth visiting your doctor to discuss this after you leave hospital. Your doctor may need to recheck your blood tests following discharge from the hospital. If so, this will be discussed with you before leaving the hospital.

Sources of advice and support

Think Kidneys NHS programme to increase awareness of the prevention, detection and treatment of acute kidney injury www.thinkkidneys.nhs.uk/information-for-the-public/

The British Kidney Patient Association (BKPA), 01420 541424 www.britishkidney-pa.co.uk

Kidney Research UK, 0845 300 1499 www.kidneyresearchuk.org

National Kidney Federation (NKF), 0845 601 0209 www.kidney.org.uk

Welsh Kidney Patients' Association www.wkpa.org.uk

You can also go to NHS Choices (www.nhs.uk) for more information

Royal United Hospitals Bath NHS Foundation Trust
Combe Park, Bath BA1 3NG
01225 428331 www.ruh.nhs.uk

Please contact the Patient Advice and Liaison Service (PALS) if you require this leaflet in a different format, or would like to feedback your experience of the hospital. Email ruh-tr.PatientAdviceandLiaisonService@nhs.net or telephone 01225 825656.