Southport Hospital
Town Lane,
Kew,
Southport,
Merseyside,
PR8 6PN
Telephone:
01704 547 471

Ormskirk Hospital
Dicconson Way,
Wigan Road,
Ormskirk,
Lancashire,
L39 2AZ
Telephone:
01695 577 111

www.MerseyWestLancs.nhs.uk

NHS
Mersey and West Lancashire Teaching Hospitals
NHS Trust

Acute Kidney Injury

Patient information

If you need this leaflet in a different language or accessible format please speak to a member of staff who can arrange it for you.

اگر به این بروشور به زبان دیگر یا در قالب دسترس‌پذیر نیاز دارید،
لطفاً با یکی از کارکنان صحبت کنید تا آن را برای شما تهیه کند.

Jeśli niniejsza ulotka ma być dostępna w innym języku lub formacie,
proszę skontaktować się z członkiem personelu, który ją dla Państwa przygotuje.

Dacă aveți nevoie de această broșură într-o altă limbă sau într-un format accesibil,
vă rog să discutați cu un membru al personalului să se ocupe
de acest lucru pentru dumneavoastră

如果您需要本传单的其他语言版本或无障碍格式，请联系工作人员为您安排。

إذا احتجت إلى هذه النشرة بلغة أُخرى، أو بتنسيق
يسهل الوصول إليه، يرجى التحدث إلى أحد الموظفين لترتيب ذلك لك.

Author: Staff Nurse
Department: Critical Care
Document Number: MWL2312
Version: 001
Review Date: 01/08/2027

Acute Kidney Injury (AKI)

You have been given this information leaflet, because you have Acute Kidney Injury (AKI). This leaflet explains the condition, what your kidneys do and what we will be doing to help you.

Acute is a term used to describe an illness that has occurred over a few hours or days (as opposed to a chronic illness that has occurred over months or years).

Kidney injury describes evidence of damage to the kidneys and how well they are functioning. This is usually seen as a change in kidney function which can be seen in blood tests and/or in the amount of urine you pass.

AKI is not to be confused with Chronic Kidney Diseases (CKD). CKD describes the gradual loss of kidney function over a longer period of time. It is a progressive illness that gets worse over time.

It is very important that AKI is detected promptly, as in some cases it can be very serious. In the majority of cases, early detection and treatment will lead to the resolution of AKI.

Special instructions

Contact information if you are worried about your condition:

Your own GP

Other useful telephone numbers/contacts:

NHS 111

Stop Smoking Helpline (Sefton)
0300 100 1000

Stop Smoking Helpline (West Lancashire)
0800 328 6297

For appointments telephone
(01695) 656680

Email
soh-tr.appointments@merseywestlancs.nhs.uk

During your contact with us, it is important that you are happy with your care and treatment. Please speak to a member of staff and/or the ward/department sister/charge nurse if you have questions or concerns.

Matron

A matron is also available during the hours of 9am to 5pm, Monday to Friday. During these periods, ward/department staff can contact the matron to arrange to meet with you. Out of hours, a senior nurse can be contacted via the ward/department to deal with any concerns you may have.

Infection control request

Preventing infections is a crucial part of our patients' care. To ensure that our standards remain high, our staff have regular infection prevention and control training and their practice is monitored in the workplace. We ask patients and visitors to assist us in preventing infections, by cleaning their hands at regular intervals and informing staff of areas within the hospital that appear soiled.

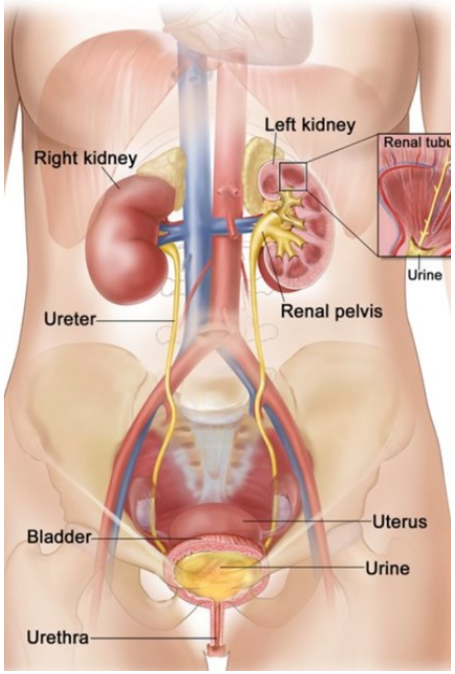
As a patient there may be times when you are unsure whether a staff member has cleaned their hands; if in doubt please ask the staff member and they will be only too happy to put your mind at ease, by cleaning their hands so that you can see them.

Where are the kidneys?

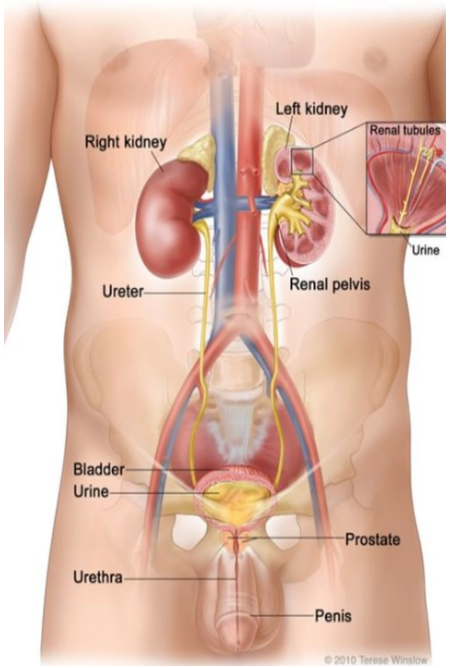
Most people have two kidneys that lie on either side of their back bone, just below the ribs. The kidneys are bean shaped and about the size of an orange. Each kidney is connected to the bladder in the pelvis, by ureters that drain the urine from the kidneys to the bladder. This describes the renal system.

The anatomy of the renal system.

Female anatomy



Male anatomy



The kidneys are responsible for:

Filtering the blood and removing waste products.

Helping to regulate blood pressure.

Balancing water and electrolyte Levels and regulating acid base balance in the body.

Helping to produce red blood cells.

Making vitamin D to keep bones healthy.

Other sources of information and support

NHS Acute Kidney Injury
Acute kidney injury - NHS (www.nhs.uk)

NHS Dialysis
https://www.nhs.uk/conditions/dialysis

Think Kidneys
AKI Home - Acute Kidney Injury (thinkkidneys.nhs.uk)

Kidney Care UK
Kidney Care UK, the UK's leading kidney patient support charity | Kidney Care UK

The National Kidney Federation
National Kidney Federation

Kidney Research UK
Home | Kidney Research UK

- Diabetic, good blood sugar control can help protect your kidneys.
- Take all your medication, taking your prescribed medication as directed by your doctor. This will ensure your kidney function does not deteriorate.
- Avoid ibuprofen, Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) are a group of drugs that can damage your kidneys, try to avoid them and use paracetamol for pain relief instead.
- If you cannot pass urine see your doctor immediately.

What happens next?

Whilst you are an inpatient, your kidney function will be reviewed by your doctor and you will be kept informed of your progress.

If you require dialysis more information will be given to you.

When your kidney function recovers, you will be followed up at the kidney clinic.

What can cause AKI?

There are many things that can cause the kidneys to stop working properly.

Some of the causes can be:

- Severe infection (particularly sepsis).
- Blockage of the urinary system or difficulty passing urine.
- Dehydration: either you have been unable to drink enough to keep yourself hydrated, or you have had a severe case of diarrhea or vomiting.
- Heavy bleeding.
- Low blood pressure (the kidneys are very vascular and rely on a constant supply of blood, which is reduced in low blood pressure).
- Some medications.
- Sometimes the dye used in some x-ray or computed tomography scans (CT scan).
- Some surgical operations carried out in hospital.

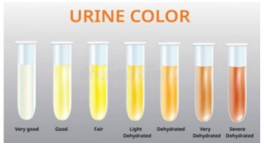
What are the signs of AKI?

You do not usually feel unwell initially, until the kidney function has deteriorated significantly.

One of the first signs that the kidneys are not working properly, is a reduction in the amount of urine produced.

Later symptoms include:

Dark urine or no urine



Thirst

Build up of fluid (oedema)

Tiredness

Muscle cramps

How long do I need to stay in hospital?

You will usually need to remain in hospital until your kidney function recovers to a safe level.

What could I do to stop this happening again?

You could prevent AKI by minimizing the risk factors;

- Drink plenty of fluids when unwell, especially if you are suffering with diarrhea and/or vomiting. If you are not able to do this then seek urgent medical attention.
- If you have an infection, you should see your doctor if you are very unwell, dizzy and passing less urine.
- High blood pressure control. If you suffer from high blood pressure make sure you take your medication and measure your blood pressure regularly.
- Do not drink as much alcohol. Too much alcohol is associated with high blood pressure which can affect your kidneys.

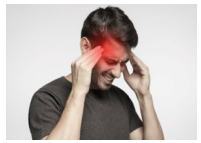
Salt

- Too much salt in your diet can increase your blood pressure. Salt can also make you thirsty. If you are on a fluid restriction, this can make it harder to keep to your fluid allowance.
- Try to use less salt in your diet and limit processed foods, that are high in salt.
- Do not use a salt substitute such as LoSalt or Selora.

Potassium

- When your kidneys are not working properly, they struggle to maintain the potassium balance. Some blood pressure tablets can further increase potassium levels in the blood. High levels of potassium can be dangerous to your heart.
- If your blood test shows an increased potassium level, you may require medications to reduce it. The doctor will also refer you to a dietician for advice on a low potassium diet.

Headache



Nausea and vomiting

Confusion

Changes in blood pressure

A blood test can identify acute kidney injury before any symptoms are present.

What tests will I need?

Kidney function can be measured in various ways;

- The use of a catheter to measure urine output.
- Blood tests to measure the levels of waste products (creatinine and urea) that have built up in the blood.
- Blood tests can also measure the levels of salts and acid in the blood, to see if they are balanced.

- Urine tests for protein and blood can indicate leakage due to kidney damage.
- You may also be sent for an electrocardiogram (ECG), x-rays or ultrasound scans of your kidneys.
- Some types of AKI may require a kidney biopsy to determine the cause. A tiny piece of your kidney is taken by a needle under local anesthetic.

What treatment will I have?

There is no specific treatment for AKI, the treatment is usually dependent on the cause. So it is important to find out the cause and treat accordingly.

- You may need intravenous fluids to rehydrate you.
- Some patients require tablets to reduce the build up of fluid and acid.
- A urinary catheter may be used to relieve urinary tract blockage and/or monitor your urine output.
- You may require antibiotics to treat an infection.
- You may also be put on dialysis if your kidneys do not respond. This involves passing your blood through a machine for a number of hours. The machine cleans your blood while your kidneys recover.

Diet and fluids in AKI

Why is diet important?

When the kidneys are not working well, a build up of waste products and fluids can occur in the body. Eating the right foods can help prevent a build up of waste products, help control your blood pressure and keeps salts in balance.

Fluid

- Some patients require more fluid, whilst others require a fluid restriction. The doctor will advise how much water you should drink in a day.
- As well as tea, water and other drinks, you will also need to count certain foods as part of your fluid allowance for example; jelly, ice cream, milk on cereal, soup etc.