Wrightington, Wigan and Leigh Teaching Hospitals
NHS Foundation Trust

Acute Kidney Injury (AKI)

Version number: **6**
Last modified date: **12th November 2026**

Patient Information

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- Author ID: JG
- Leaflet ref: SN 001
- Last review: November 2022
- Expiry Date: November 2024

What are my kidneys?

- Each person is usually born with 2 kidneys
- They are each approximately the size of a clenched fist
- They are kidney bean shaped organs located under the rib cage in the middle of the back and sit either side of your spine.

What do my kidneys do for me?

- The main job of the kidney is to filter and clean the blood and remove unwanted waste products from the body.
- The kidneys then produce urine that removes these toxins and waste products from our body.
- They help maintain a balance of the fluid within our body again removing any excess as urine. Approximately 2-3 litres of urine is produced each day depending on how much fluid we drink.
- By producing urine, they also balance the amount of salt (sodium), potassium and phosphate within the body at any given time.
- They are as important to us as our heart, lungs, and brain

The kidneys produce 3 hormones which regulate:

- Blood pressure
- Vitamin D levels and healthy bones
- Red blood cells (oxygen carrying blood cells in the body)

Acute Kidney Injury (AKI) – What is it?

AKI is common; it affects approximately 20% of adult patients admitted to hospital.

AKI is when the functioning of the kidneys becomes impaired, and they do not work as normal. This can be a mild impairment (Stage 1) or a more severe impairment (Stage 3).

In hospital, we detect AKI from certain blood tests performed, or if you are found to not be passing enough urine.

What are the common causes of AKI?

- Dehydration
- Infection
- Some medications
- Poor fluid intake
- Obstruction in the urinary tract

How will we treat your AKI in Hospital?

We may give you fluids through a drip to maintain hydration. We will take a sample of your urine and test this for abnormalities – we may then have to send this to the laboratory for more detailed testing.

- Repeated Blood tests to check the function of your kidney in response to treatments given.

- We may ask for an Ultrasound scan of your kidneys and bladder.
- We may withhold certain medications temporarily until your kidneys recover.
- We may feel that it is necessary to insert a tube called a catheter into your bladder to collect and measure your urine output.

The nurses on the ward will monitor how much fluid you take in and how much fluid you pass (urine) – this is known as your fluid balance.

Your condition may require you to be seen by a specialist kidney doctor from Salford Royal Hospital.

What happens next?

Most AKIs improve with simple treatments put into place. Some AKIs however do not improve, and more specialist investigations and treatments are required.

You may need to be connected to a special machine that does the job of your kidneys and filters your blood (dialysis machine).

We may have to transfer your care to Salford Royal Hospital.

A renal tissue biopsy is required in a small number of cases, to help guide treatment; this is performed at Salford Royal Hospital.

Follow up

Most patients when discharged from hospital following an AKI are referred back to their GP for repeat blood tests and medication reviews. A small number of patients will be asked to attend a renal clinic if your kidneys do not fully recover.

Contact details

AKI Specialist Nurse - Telephone 01942 822118



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