

Teaching Hospitals NHS Foundation Trust

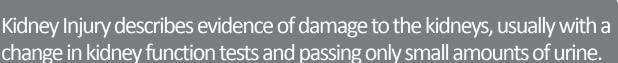
Kidneys are important to our wellbeing,

looking after our bodies through the production of urine to get rid of excess water and toxins.



What is Acute Kidney Injury?

Acute is a term used to describe something that has occurred over hours or days (as opposed to chronic which means months or years).

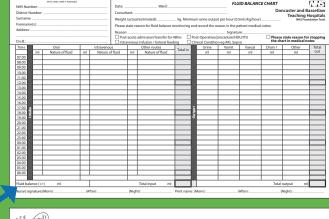


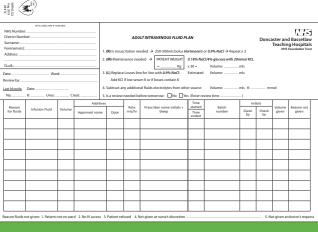
Acute kidney injury is a sudden and recent reduction in a person's kidney function. It is not caused as a result of a physical blow to the body.

Mary CO.

How to prevent Acute Kidney Injury

- Identify high risk groups
- Be aware of common insults on kidneys
- Use Fluid balance charts to know your patients intake and output
- WPR44741 for fliud balance
- WPR42322 for IV fluids and fluid balance
- Hydrate, Hydrate **Hydrate**





Medicines Optimisation in Acute Kidney Injury (AKI) and patients at risk of AKI



- ✓ Always review medication when AKI is identified (look for ICE alerts)
- Decisions may vary dependent on the overall clinical picture, this list is not exhaustive
- ✓ Advice can be obtained from: Renal SpR (bleep 1163), renal pharmacist (bleep 1970) or renal consultant (available 24/7 via switchboard)



Withhold Then Reassess

- ✓ NSAIDs (e.g. naproxen, ibuprofen)
- √ Thiazides
 (e.g. bendroflumethiazide)
- K-sparing diuretics(e.g. spironolactone, amiloride)
- ✓ ACE inhibitors & Angiotensin 2 Receptor Blockers ('prils & sartans)
- Metformin
- Methotrexate & Aminosalicylates (e.g. sulfasalazine, mesalazine)
- ✓ Statins & Fibrates



Review Dose

- ✓ Antihypertensives (calcium channel blockers, -blockers, -blockers, may need to withhold)
- ✓ Nitrates & nicorandil
- ✓ Opioids (use short-acting preparations, avoid morphine & codeine)
- ✓ Tramadol (avoid long-acting preparations)
- ✓ Benzodiazepines
- ✓ Gabapentin & pregabalin
- Loop diuretics (e.g. furosemide, bumetanide)
- ✓ Aciclovir
- ✓ Fluconazole

- ✓ Aminoglycosides (e.g. gentamicin) nephrotoxic potential, review effective alternatives
- ✓ Penicillins / Cephalosporins
- ✓ Trimethoprim (consider alternative as can raise K+ and Cr)
- ✓ Vancomycin / Teicoplanin
- Oral hypoglycaemic agents (e.g. gliclazide, glimepiride, sitagliptin)
- ✓ Levetiracetam
- Allopurinol
- Low molecular weight heparin (e.g. dalteparin)
- ✓ DOACs (e.g. rivaroxaban, apixaban,



Monitor

- ✓ Ciclosporin (e.g. Neoral®, Capimune®)
- √ Tacrolimus (e.g. Prograf®,
 Adoport®, Advagraf®)
- ✓ Digoxin

- ✓ Phenytoin
- ✓ Warfarin
- Lithium (e.g. Priadel®) avoid if possible/seek alternative