# Acute Kidney Injury Primary Care Top Ten Tips



Wessex Strategic Clinical Networks

Acute kidney injury (AKI) is associated with 100,000 deaths per year. Up to a third of those deaths could be avoided. AKI occurs in one in five acute hospital admissions. Over 60% of these AKI presentations start in the community and primary care is in a position to play a leading role in tackling the problem. Even mild AKI episodes are associated with poorer outcomes for patients and AKI costs the NHS an estimated £500m each year.

### Is it true?

Does the clinical picture fit the test? Or is this a false positive result? Repeat if in doubt and do a urine dipstick.

# Be AKI risk aware

The most well-recognised risk factors for AKI include:

- Previous AKI
- Age over 75 years
- CKD at baseline
- CCF
- Atherosclerotic peripheral vascular disease
- Diabetes
- Liver disease
- Malignancy and its treatment
- Medications especially ACE inhibitors, ARBs, NSAIDs and diuretics.

## Acute illness and CKD

Acute illness and CKD together increase the risk of AKI. *Think renal function* (bloods and urine dipstick) when patients with CKD are unwell.



Sepsis, dehydration, hypovolaemia and hypotension are the main triggers for AKI episodes. Consider lowering your threshold for conducting a clinical review and treating septic episodes earlier in at risk patients.



#### Drug toxicity

Consider toxicity of the following drugs when renal function declines, especially during acute illness: metformin, digoxin, opiates and lithium.

## **O** Patient tailored advice

Consider including tailored **'sick day'** advice to patients and/or carers as part of admission avoidance plans. Such advice could include:

- Fluid balance at times of acute illness
- When to seek medical help if unwell
- Individual medication review, e.g. avoid NSAIDs, ACE inhibitors and diuretics with dehydrating illnesses
- Remember advice to avoid OTC NSAIDs.



#### **Medication review**

In patients recognised to be at risk of AKI a medication review should be carried out regularly to try to modify this risk. Ask yourself are there safer alternatives to medications known to increase AKI risk? Vaccination should be encouraged in at risk groups.



Patients who experience an AKI episode are at risk of repeat episodes in the future. Any confirmed episode of AKI should be coded in the primary care record to highlight this risk and to increase vigilance.

Read codes for AKI 1-3 respectively are: K04C K04D and K04E



Ensure you have a robust follow up system for patients diagnosed with AKI to check for development of CKD or worsening of pre-existing CKD. Check renal function after 6 months or earlier if indicated.



Ensure your practice has a priority system in place to follow up blood test results from patients at risk of AKI who are unwell. This should include a review of handover practices.



Download the Wessex Adult Acute Kidney Injury Care Pathway for Primary Care here.

Sthink Kidneys: www.thinkkidneys.nhs.uk

Acute Kidney Injury NICE clinical guideline 169: www.nice.org.uk/guidance/cg169

Wessex Strategic Clinical Networks: www.wessexscn.nhs.uk