NHS
Oxfordshire
Clinical Commissioning Group

Primary care management after hospitalisation with AKI (adults, excluding maternity)

The patient has had an electronic alert for Acute Kidney Injury (AKI) whilst in hospital. Assuming the patient did have AKI[1], this may have resulted in the temporary suspension of some of the patient's chronic medications (e.g. ACE inhibitors, Angiotensin Receptor Blockers [ARBs], diuretics, other antihypertensive medications or nephrotoxic medications). The discharge summary should ideally indicate:

- what has been stopped or reduced
- whether discharge creatinine is back to baseline or not
- when to undertake the first primary care review.

If the patient's creatinine remains above baseline:

- Please continue to recheck U&E and blood pressure/fluid status until baseline is established. This may mean serial 1-2 weekly reviews, depending on stage of AKI and degree of recovery. Avoid restarting essential medications until creatinine is back to old baseline or a new baseline has been established.

If the patient's creatinine is now at baseline:

- Please restart essential medications in a sequential fashion.
- If blood pressure is high or antihypertensives are being restarted for other indications, standard rules are:
  - Use ACE inhibitors or ARBs if there is a specific indication (e.g. systolic heart failure, diabetic/proteinuric nephropathy).
  - If over 55 years old or of Black African/Afro-Caribbean ethnicity, and no specific indication for ACE inhibitor or ARB, please consider Calcium Channel Blocker as first line antihypertensive, even if previously on ACE inhibitor or ARB .
  - Avoid restarting ACE inhibitors or ARBs for hypertension as the sole indication if potassium raised, patient is frankly hypovolaemic/dehydrated or is at risk of recurrent hypovolaemia/ dehydration (e.g. high output ileostomy).
  - After restarting ACE inhibitor or ARB please recheck U&E at 1-2 weeks, and accept up to 25% rise in creatinine. Do not continue to uptitrate if progressive rises[2].
- If the patient is currently normotensive, so remaining off previously given antihypertensives, please schedule further blood pressure checks; as for U&E, blood pressure can take weeks to months to return to prior levels after acute illness.
- Please avoid restarting non-essential nephrotoxic medications, e.g. NSAIDs.
- For further information on restarting medications, please see Think Kidneys Guidance.
- Encourage patient to seek medical advice early if acute unwell or notices reduced urine output (patient information leaflet).

If the patient is left with persistent abnormal kidney function (i.e. CKD), please manage as per CKD guidelines (The renal association CKD guide). This may include referral to nephrologist as per these CKD guidelines, i.e. if eGFR persistently <30 mL/min/1.73m^2 for ≥3mo, especially if there is evidence of end-organ problems (anaemia with Hb <100 g/L, hypocalcaemia/hyperphosphataemia, acidosis).

If the patient has normal kidney function (eGFR >90 mL/min/1.73m^2), please check urine dipstick, U&E, blood pressure, and fluid status, at least annually for 2-3 years, as these patients are at risk of developing CKD.

[1] False positive alerts may result from use of certain medications (Trimethoprim), or in patients with CKD stage 5 or those on dialysis.
[2] Further rises may be acceptable if ACE inhibitor or ARB being used for systolic heart failure or if heavily proteinuric, as the potential benefit may outweigh potential risk.