Acute Kidney Injury – Initial Management And Referral

Renal Function should be checked on all Emergency Admissions (then every 24 hours if AKI)

Urinalysis for all

Blood	Proteinuria	Leucocytes
Vasculitic screen: **ANCA** **ANA** **C3, C4,** **Cryoglob** **Myeloma screen:** **Igs** **SFL**	**ACR**	**MSU**

Staging AKI (Creatinine and Urine Output criteria)

AKI stage	Creatinine Rise	Urine output
1	Increase in creatinine ≥26.4 µmol/L or 1.5–2 fold increase from baseline	<0.5 mL/kg for 6 hr
2	Increase in creatinine >2–3 fold from baseline	<0.5 mL/kg for >12 hr
3	Increase in creatinine >3-fold or serum creatinine >350 µmol/L	<0.3 mL/kg for 24 hr or anuria for 12 hr

Accurate fluid balance/observations

If high early warning score request critical care outreach review.

If hypotensive despite adequate fluid resuscitation or systolic BP < 90mmHg after > 2 L fluid then senior +/- outreach review.

Caution required for heart failure patients: use clinical judgement for degree of volume replacement.

Renal referral for Acute Kidney Injury	
AKI Stage 1	Refer to renal team as per NICE [NG148], *e.g.,* only if no clear cause, inadequate response to treatment, suspected intrinsic kidney disease/myeloma, renal transplant, CKD Stage 4/5 or complications of AKI (high potassium etc)
AKI Stage 2	
AKI Stage 3	All patients should be referred & discussed with renal team unless palliative

Management for all stages of AKI = "STOP" AKI

S	**SEPSIS / HYPOTENSION / PRERENAL / ATN. Antibiotics within 1 hour (renal dosing). Avoid empirical gentamycin in AKI. Relevant cultures (urine/blood) before antibiotics. Adequate fluid resuscitation.**
T	**TOXINS – All patients should have a nephrotoxic medication review (e.g. NSAID/ACEi/ARB) avoid post-operative NSAID**
O	**OBSTRUCTION - AKI is usually fully reversed if obstruction relieved promptly. USS scan within 24 hours**
P	**PARENCHYMAL / INTRINSIC RENAL DISEASE, think rapidly progressive gn such as vasculitis in someone with rash & active urine sediment. Rhabdomyolysis if clinically suspected (CK). If anaemic/low platelet count consider HUS/TTP. Tubulointerstitial nephritis if new drug commenced recently & no obvious alternative cause.**

For detailed guidelines refer to the Black Country Network AKI guidelines which are available on the intranet.