The Shrewsbury and Telford Hospital NHS Trust

ACUTE KIDNEY INJURY (AKI) QUICK REFERENCE GUIDE

Ref No: 2073

Lead Person	:	Dr R Diwakar, Consultant Nephrologist
Care Group	:	Unscheduled Care (Renal)
Implemented	:	October 2014
Last updated	:	November 2019
Last reviewed	:	November 2019
Planned review	:	November 2022
Keywords	:	

Patient has/ is at risk of AKI

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Elderly, diabetic, comorbidities, sepsis, dehydration, on ACEI/ARB diuretics, other

Ensure patient Safe

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Potassium > 6.5/ Severely acidotic/ Pulmonary oedema
Complications of uraemia (encephalopathy/ pericarditis)

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Contact Nephrologists if these don't respond to medical management

Volume status

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Hypovolaemic/ Euvolaemic/ Fluid overloaded

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See guidelines on IV fluid resuscitation

Monitoring

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Monitor observations (minimum 4 hourly)
Consider twice daily blood tests while creatinine rising
Daily weights, Institute fluid intake output chart
Urinary catheter (if indicated)

Investigations

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Urine dipstick and documentation of result
If proteinuria check protein-creatinine ratio
Ultrasound KUB < 24h (if cause not clear)
Ultrasound KUB < 6h (if pyonephrosis suspected)
Bone, liver function, CRP, CK (if appropriate)
Myeloma screen (if appropriate)
Autoimmune screen (if appropriate)
If platelets low do blood film, reticulocyte, LDH

Reduce/ Treat Risk Factors

Review drug chart and dosages
Stop diuretics if dehydrated*
Stop NSAID/ACEi/ARB/K-sparing diuretics/metformin*
Stop antihypertensives if relative hypotension*
Consider H2 receptor blocker or PPI
Consider dietetic assessment
Avoid iodinated contrast procedures (if essential don't delay)
Treat sepsis → ***See sepsis care bundle***

Refer to nephrology?

Need for renal replacement therapy
AKI with no clear cause
Inadequate response to treatment
Complications associated with AKI
Stage 3 AKI
Renal transplant
CKD stage 4 or 5
eGFR ≤ 30 post recovery
Diagnosis that may need specialist treatment
e.g. vasculitis (haemo/proteinuria in absence of UTI)

Refer to urology?

Refer all upper tract obstruction to on call consultant urologist
Refer immediately if pyonephrosis (fever + hydronephrosis)
Obstructed solitary kidney
Bilateral upper urinary tract obstruction
Complications of AKI caused by urological obstruction

When nephrostomy or stenting indicated in patients with AKI, undertake as soon as possible and within 12 h of diagnosis

Discuss with Intensive Care?

Patient appears severely ill, becoming exhausted/ obtunded
Hypotension (systolic BP < 90) despite fluid resuscitation
Hypoxaemia (PaO_2 < 10kPa) despite 40% O_2
Severe metabolic acidosis
Pulmonary oedema with hypoxia
Evidence of multiorgan failure

Patients with established/developing multiorgan failure should be identified early and referred to intensive care

*__See__ "Restarting medication after AKI" leaflet

See main guidelines on AKI:
"Acute Kidney Injury (AKI) pathway for adult patients at Shrewsbury & Telford Hospitals NHS Trust (SATH)"
for further detail