BAPN AKI MANAGEMENT RECOMMENDATIONS

AKI can be preventable: early detection and appropriate management reduces harm

Risk assess for AKI

High risk groups

Nephrourological, cardiac, liver disease

Malignancy, bone marrow transplant

Dependence on others for access to fluids

Medication
(eg., ACEi, ARB, NSAIDS, diuretics, aminoglycosides, calcineurin inhibitors)

High risk scenarios

History of reduced urine output

Sepsis

Hypoperfusion or dehydration

Nephrotoxic drug or toxin exposure

Renal disease or urinary tract obstruction

Major surgery

Prevention: 3 M's

MONITOR (Early **W**arning **S**core, fluid balance, daily weight, urinalysis, serum creatinine and electrolytes)

MAINTAIN circulation (treat hypoperfusion adequately)

MINIMISE kidney insults (review, monitor and adjust medication)

Recognise AKI

Serum creatinine:
> 1.5x previous baseline (if known)
>1.5x age specific upper limit of normal (ULN)
(if creatinine between ULN and 1.5x ULN, repeat measurement)

Urine output:
<0.5mls/kg/hr for 8 hours

AKI algorithm alerts

AKI 1: Serum creatinine >1.5-2x upper limit of normal (ULN)

AKI 2: Serum creatinine 2-3x ULN

AKI 3: Serum creatinine >3x ULN

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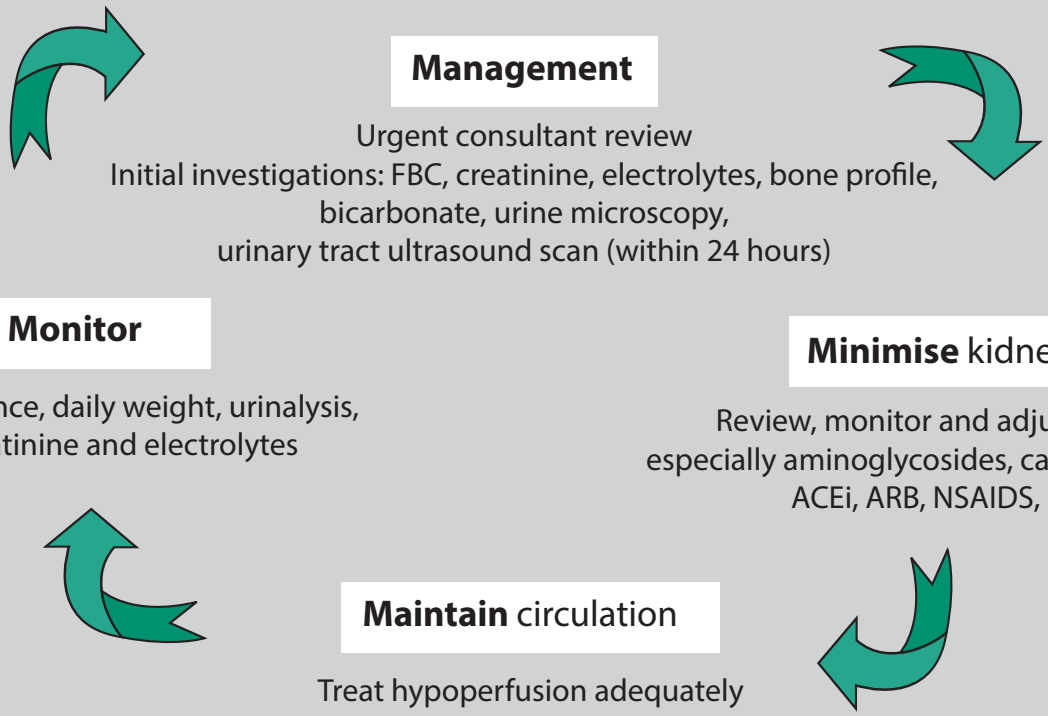
Management of confirmed AKI: 4 M's

1. Recognise and treat the underlying cause
2. Evaluate and review according to the following cycle:



Further management

AKI 1: If clinically relevant: C3/C4, ASOT, ANA, ANCA, anti-GBM antibodies, immunoglobulins, blood film, LDH, CK. **Consider discussion** with a specialist paediatrician with an interest in nephrology (SPIN) or tertiary nephrology

AKI 2: Investigations as for AKI 1. **Discuss** with SPIN or tertiary nephrology

AKI 3: Investigations as for AKI 1. **Discuss** with tertiary nephrology

PAEDIATRIC NEPHROLOGY REFERRAL

1. AKI in a patient with CKD4 or 5 or a renal transplant
2. Early referral if AKI is associated with multisystem disease or suspected intrinsic renal disease eg. haemolytic uraemic syndrome

Immediate referral in any stage of AKI with the following:
Potassium >6.5mmol/l (non-haemolysed sample)
Oligoanuria and plasma sodium <125mmol/l
Pulmonary oedema or hypertension unresponsive to diuretics
Plasma urea >40mmol/l unresponsive to fluid challenge

Follow-up

All patients who required dialysis or who have persisting proteinuria or reduced renal function at 3 months should be followed up by SPIN or tertiary nephrology

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