FRAIMWORK

FRIMLEY PARK / MEDICAL TAKE
TOP TEN

AKI

START HERE

CONFIRM AKI
Rising creatinine or oliguria

ASSESS THE PATIENT
ABCDE, obs, fluid status, urine output

CHECK TESTS
U&E, VBG, urine dip, FBC, CK if needed

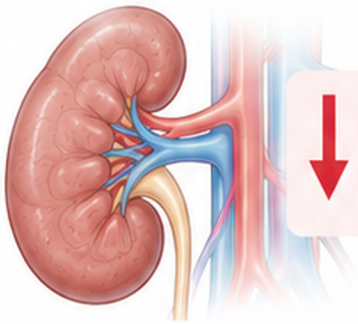
REVIEW MEDS
Think nephrotoxins: NSAIDs, ACEi/ARB, diuretics, contrast

THINK OBSTRUCTION
Bladder scan, POCUS or urgent ultrasound if suspected

Most AKI is pre-renal — but always ask if there is intrinsic renal disease or obstruction.

THREE CAUSE GROUPS

1 PRE-RENAL
Reduced renal perfusion



Reduced blood flow to the kidneys (e.g. dehydration, sepsis, heart failure)

COMMON CAUSES
- Hypovolaemia, sepsis, heart failure, poor intake, vomiting / diarrhoea

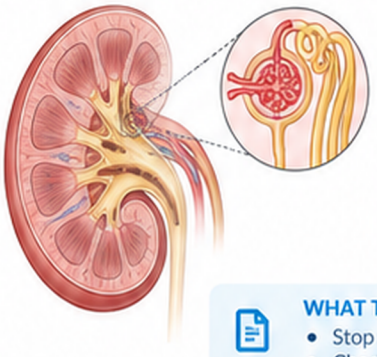
CLUES
- Dry mucosa, tachycardia, hypotension, low urine output, fluid losses

HOW TO IDENTIFY IT
- History and exam
- Assess fluid status carefully
- Often improves when perfusion is restored

WHAT TO DO
- Treat the cause
- Give fluids if hypovolaemic
- Do not give fluid blindly if overloaded

Pre-renal AKI is common and often reversible.

2 INTRA-RENAL
Direct damage to the kidneys



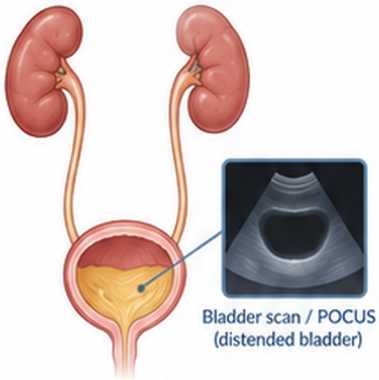
THINK ABOUT
- ATN after prolonged hypoperfusion or sepsis
- Nephrotoxins
- Glomerulonephritis / interstitial nephritis
- Rhabdomyolysis

CLUES
- Abnormal urine dip, blood or protein
- Poor recovery despite resuscitation
- Rash or eosinophilia can suggest interstitial nephritis
- Muscle pain or dark urine → check CK for rhabdo

WHAT TO DO
- Stop nephrotoxins
- Check urine, bloods and CK if relevant
- Think renal causes early if the story does not fit pre-renal AKI
- Seek renal input if unclear or severe

Do not miss rhabdomyolysis.

3 POST-RENAL
Obstruction to urine outflow



Bladder scan / POCUS (distended bladder)

COMMON CAUSES
- Retention, prostate enlargement, stones, pelvic mass

CLUES
- Anuria or worsening oliguria
- Lower abdominal discomfort, palpable bladder
- Risk factors for obstruction

HOW TO IDENTIFY IT
- Bladder scan
- POCUS can suggest hydronephrosis
- Urgent ultrasound within 24 hours if cause unclear or obstruction suspected

WHAT TO DO
- Catheterise if retention is likely
- Refer urgently if pyonephrosis, solitary kidney or bilateral obstruction

POCUS helps you spot obstruction early.

ALSO REMEMBER

- AKI can present with very little urine
- Chart fluid balance and urine output
- Hyperkalaemia, pulmonary oedema and severe acidosis need urgent escalation
- Do not routinely use loop diuretics to treat AKI itself
- Discuss stage 3 AKI or unclear AKI with renal / senior teams early