

HISTORY

HPC

- Duration symptoms
- Speed of onset: Sudden / Gradual
- Recent fluid intake: Oral / IV
- Fevers: Sepsis
- Constipation
- Trauma / Surgery: Kidney / Bladder / Urethra
- Cauda Equina symptoms: Urinary retention / Saddle Anesthesia / Lower back pain / Lower limb neurological symptoms

PMH

- Heart Failure
- Long term catheter
- BPH / Prostate cancer
- Renal malignancy
- CKD
- Lower back pain

DH

- Tricyclic antidepressants
- Decongestants
- Nephrotoxins:
 - NSAIDS / Diuretics / ACEI / ARBs / PPI
 - See [AKI \(linked\)](#) for more examples
- Anti-Parkinsons medications
- Antipsychotics

SH / FH

- Family history of renal disease

EXAMINATION

GENERAL OBSERVATIONS

- Increased work of breathing
- Distressed
- Urinary catheter: Haematuria / Sediment

AIRWAY

- Ensure airway patent

BREATHING

- Physical Observation: FiO₂ / RR / SaO₂
- Auscultation: Wheeze / Crackles / Air entry

CIRCULATION

- Physical Observation: HR / BP
- Fluid input-output: Fluid balance (esp urine output)
- CRT: Central / Peripheral
- Mucus membranes: Moist / Dry
- JVP: Not visible / <2cm / Raised
- Peripheries: Bilateral swelling / Pitting oedema / Sacral oedema

DISABILITY

- Physical Observation: Temp (High / Low) - Sepsis
- GCS: >8 / ≤8

EXPOSURE

- Abdo: Palpable bladder / Tender suprapubic region
- Abdo: Bowel sounds
- PR: Large prostate / Faecal impaction
- Abdo: Ascites

INVESTIGATIONS

BLOODS

- FBC / U&E / CRP

BLADDER SCAN

- Pre-void / Post-void
 - > 200ml Post-void potential retention
- Catheter: Perform after catheter flush
 - Increased volume post flush = potential blocked catheter

URINALYSIS

- Blood
- Leukocytes
- Nitrites

DO NOT TEST IF AGE > 65 AND SYMPTOMATIC. TREAT EMERGENTLY + SEND MC&S

MICRO

- Urine culture: If +ve urinalysis

VBG

- If suspecting AKI:
 - pH
 - Lactate

CT KUB / US KUB

- Hydronephrosis
- Obstructing renal calculi
- Kidney / Ureter / Bladder mass

DISCUSS WITH SENIOR

MRI LUMBAR SPINE

- If suspecting Cauda Equina

DISCUSS WITH SENIOR

POTENTIAL DIFFERENTIALS

AKI MULTIPLE CAUSES

URINARY RETENTION PROSTATE / MEDICATION INDUCED

BLOCKED URINARY CATHETER

CONSTIPATION

CAUDA EQUINA

OBSTRUCTING RENAL CALCULI

SEPSIS / INFECTION UTI

POOR FLUID INTAKE

HAEMATURIA OBSTRUCTING BLOOD CLOT