

# HISTORY

HPC	<ul style="list-style-type: none"><li>• Duration symptoms</li><li>• Speed of onset: Sudden / Gradual</li><li>• Recent fluid intake: Oral / IV</li><li>• Fevers: Sepsis</li><li>• Constipation</li><li>• Trauma / Surgery: Kidney / Bladder / Urethra</li><li>• Cauda Equina symptoms: Urinary retention / Saddle Anesthesia / Lower back pain / Lower limb neurological symptoms</li></ul>
PMH	<ul style="list-style-type: none"><li>• Heart Failure</li><li>• Long term catheter</li><li>• BPH / Prostate cancer</li><li>• Renal malignancy</li><li>• CKD</li><li>• Lower back pain</li></ul>
DH	<ul style="list-style-type: none"><li>• Tricyclic antidepressants</li><li>• Decongestants</li><li>• Nephrotoxics:<ul style="list-style-type: none"><li>◦ NSAIDs / Diuretics / ACEI / ARBs / PPI</li><li>◦ See <b>AKI (linked)</b> for more examples</li></ul></li><li>• Anti-Parkinsons medications</li><li>• Antipsychotics</li></ul>
SH / FH	<ul style="list-style-type: none"><li>• Family history of renal disease</li></ul>

# EXAMINATION

GENERAL OBSERVATIONS	<ul style="list-style-type: none"><li>• Increased work of breathing</li><li>• Distressed</li><li>• Urinary catheter: Haematuria / Sediment</li></ul>
AIRWAY	<ul style="list-style-type: none"><li>• Ensure airway patent</li></ul>
BREATHING	<ul style="list-style-type: none"><li>• Physical Observation: FiO<sub>2</sub> / RR / SaO<sub>2</sub></li><li>• Auscultation: Wheeze / Crackles / Air entry</li></ul>
CIRCULATION	<ul style="list-style-type: none"><li>• Physical Observation: HR / BP</li><li>• Fluid input-output: Fluid balance (esp urine output)</li><li>• CRT: Central / Peripheral</li><li>• Mucus membranes: Moist / Dry</li><li>• JVP: Not visible / &lt;2cm / Raised</li><li>• Peripheries: Bilateral swelling / Pitting oedema / Sacral oedema</li></ul>
DISABILITY	<ul style="list-style-type: none"><li>• Physical Observation: Temp (High / Low) - Sepsis</li><li>• GCS: &gt;8 / ≤8</li></ul>
EXPOSURE	<ul style="list-style-type: none"><li>• Abdo: Palpable bladder / Tender suprapubic region</li><li>• Abdo: Bowel sounds</li><li>• PR: Large prostate / Faecal impaction</li><li>• Abdo: Ascites</li></ul>

# INVESTIGATIONS

BLOODS	<ul style="list-style-type: none"><li>• FBC / U&amp;E / CRP</li></ul>	
BLADDER SCAN	<ul style="list-style-type: none"><li>• Pre-void / Post-void<ul style="list-style-type: none"><li>◦ &gt; 200ml Post-void potential retention</li></ul></li><li>• Catheter: Perform after catheter flush<ul style="list-style-type: none"><li>◦ Increased volume post flush = potential blocked catheter</li></ul></li></ul>	
URINALYSIS	<ul style="list-style-type: none"><li>• Blood</li><li>• Leukocytes</li><li>• Nitrites</li></ul>	<div>DO NOT TEST IF AGE &gt; 65 AND SYMPTOMATIC. TREAT EMPERICALLY + SEND MC&amp;S</div>
MICRO	<ul style="list-style-type: none"><li>• Urine culture: If +ve urinalysis</li></ul>	
VBG	<p>If suspecting AKI:</p> <ul style="list-style-type: none"><li>• pH</li><li>• Lactate</li></ul>	
CT KUB / US KUB	<ul style="list-style-type: none"><li>• Hydronephrosis</li><li>• Obstructing renal calculi</li><li>• Kidney / Ureter / Bladder mass</li></ul>	<div>DISCUSS WITH SENIOR</div>
MRI LUMBAR SPINE	<ul style="list-style-type: none"><li>• If suspecting Cauda Equina</li></ul>	<div>DISCUSS WITH SENIOR</div>

# POTENTIAL DIFFERENTIALS

AKI MULTIPLE CAUSES	CONSTIPATION	SEPSIS / INFECTION UTI
URINARY RETENTION PROSTATE / MEDICATION INDUCED	CAUDA EQUINA	POOR FLUID INTAKE
BLOCKED URINARY CATHETER	OBSTRUCTING RENAL CALCULI	HAEMATURIA OBSTRUCTING BLOOD CLOT