Common Junior Doctor On-call Bleeps

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Table 1: Things to consider doing for unwell patients you are bleeped about when on-call (before you escalate to a senior if required)

	Fall	Tachycardia	Hypotension	Temperature spike	Low urine output	Chest pain	Shortness of breath	Confusion / ↓GCS
Common causes	1. Mechanical 2. Dehydration 3. Postural hypotension 4. Confusion (electrolyte abnormality/ dementia/ sepsis) 5. Arrhythmia 6. Aortic stenosis	1. Dehydration/ hypotension 2. Sepsis 3. Arrhythmia e.g. AF 4. PE 5. Acute pain	1. Fluid/blood loss 2. Sepsis 3. Cardiogenic shock 4. Anaphylaxis	1. Infections (e.g. chest, UTI) 2. SIRS (sepsis most common cause) Post-op Surgical collections <2d = atelectasis 2-4d = pneumonia 4-6d = anastomotic leak 6-8d = wound infection 8-10d = DVT/PE	1. Hypovolaemia 2. Blocked catheter 3. Acute kidney injury -Pre: hypotension -Renal: acute tubular necrosis, nephrotoxic medications, GN -Post: urinary obstruction/ retention	1. Musculoskeletal 2. Arrhythmia 3. PE 4. MI/angina 5. Oesophagitis/ oesophageal spasm	1. Anxiety 2. COPD/asthma 3. PE 4. Pneumonia 5. Pneumothorax 6. Atelectasis 7. Arrhythmia 8. Cardiac failure/ overload	1. Dementia 2. Delirium 3. Drugs (e.g. opiates) 4. Sepsis 5. Electrolyte abnormality 6. Neurological pathology (e.g. cerebral haemorrhage) 7. Respiratory acidosis if CO_2 retainer 8. Hypoglycaemia
Complications	• Mechanical injury • Cerebral bleed	• Reduced myocardial function • Arrhythmia	• Acute kidney injury • Reduced GCS • End organ failure	• Fluid loss • Overwhelming sepsis	• Acute tubular necrosis/ acute kidney injury	-	• Cerebral hypoxia	• Falls • Reducing GCS • Airway compromise • Progressive disease
During call	• Witnessed? Head injury? • Background • Observations and GCS • On anticoagulation?	• Background • Observations	• Background • Observations • Fluid balance	• Background • Observations	• Background • Observations • Fluid balance • Bladder scan (if done)	• Background • Observations	• Background • Observations	• Background • Pre-morbid state • Observations • Drugs given
Before arrival (if possible)	• ECG • Postural BP	• ECG	• Fluid challenge (if no Hx of heart failure)	• Bloods • Urine dip	• Flush/change catheter • Bladder scan	• ECG • BP in both arms	• Oxygen • ECG	• Capillary glucose
Background	Read patient notes + latest investigation results							
History	• Usual falls history • NS, CVS, RS systems reviews • Headache/vomiting/injury	• Determine any symptoms • Full systems review				• SOCRATES • RS & CVS system review • Risk factors	• Determine any symptoms • RS & CVS system review	• Determine any symptoms • Full systems review • Collateral history • Drug chart (?opiates)
Examination	• Observations & postural BP • GCS & pupils reactivity to light • Neurological exam • Look for injuries • Skin: bruising/bleeding • Bone tenderness/shape (inc skull) & flex/rotate hips (fractures)	• Observations • Assess fluid balance • Look for infection sources • Multi-system exam • Calves (DVT)	• Observations + GCS • Assess fluid balance and urine output • Hydration status exam (inc pul/pedal oedema) • Look for infection sources: multi-system exam + look at surgical wounds, drains, chest	• Observations • Sepsis signs (cap refill, skin temp, pulse etc) • Look for infection sources: multi-system exam, iatrogenic causes (surgical wounds, drains, lines), exposure (look at skin, joints, peri-anal area)	• Observations • Assess fluid balance • Multi-system exam • Hydration status exam (esp pulmonary/peripheral oedema) • Examine/flush catheter	• Observations • BP in both arms • Cardiorespiratory exam • Examine calves	• Observations • Cardiorespiratory exam • Examine calves	• Observations & cap glucose • GCS & pupils & orientation • Neurological exam • Sepsis signs (cap refill, skin temp, pulse etc) • Look for infection sources: multi-system exam + look at surgical wounds, drains, chest, etc
Investigations ↘**B**loods ↘**O**rifice tests ↘**X**-rays/imaging ↘**E**CG ↘**S**pecial tests	• ECG • CT head if hit head and: on anticoagulation, 2 or more vomits, focal neurology, suspected skull fracture, GCS decreased by 1 or more, post-traumatic seizure • Sepsis Ix if differential (see temperature spike) • X-ray any possible fracture	• ECG • U&Es + VBG • Sepsis Ix if differential (see temperature spike)	• Image possible sources of fluid loss • CXR if pulmonary oedema • Sepsis Ix if differential (see temperature spike) • VBG (lactate) *Assess end organ perfusion – urine output, lactate, GCS*	Full septic screen: • **B:** bloods (WCC, Hb, plt (DIC)), **blood cultures**, VBG (lactate) • **O: urine dip**, culture any other fluids • **X: CXR**, CT abdo if may have surgical collection • **E: -** • **S: -**	• **B:** U&Es + VBG (acidosis/low bicarb/hyperkalaemia) • **O:** urine dip • **X:** bladder scan (to determine if it's urinary retention i.e. >500ml or true low UO), consider renal USS • **E: -** • **S: -**	• **B:** bloods, D-dimer if low wells score, cardiac enzymes (now and at 12 hours) if cardiac • **O: -** • **X:** CXR • **E:** ECG • **S: -**	• **B:** bloods, D-dimer if low wells score, cardiac enzymes, ABG if low sats • **O:** sputum culture • **X:** CXR • **E:** ECG • **S: -**	• Bloods (inc calcium) + VBG (lactate) • ABG if could be CO_2 retaining • Urine dip • Sepsis Ix if differential (see temperature spike) • CT head if neurological pathology or excluded all other causes
ABCDE management	See OSCEstop ABCDE notes							
Specific management	• Treat cause • Treat injuries • Neurological observations as per protocol if hit head or unwitnessed	• Treat cause • Analgesia • Correct electrolytes • Empirical antibiotics if required • Fluids • If AF, consider rate limiting medication • If arrhythmia with SBP<90, get help	• Fluid challenges • Monitor urine output • Treat cause • May need inotropic support in ITU if in shock (hypotension unresponsive to fluid resuscitation)	• Treat cause e.g. targeted Abx • Oxygen/saline nebs/ salbutamol nebs/physio if chest If septic: • Sepsis six • Surgery may be needed (joint/ abdo/ necrosis sepsis)	• Fluid bolus and reassess (repeat bladder scan if no ↑UO) • Stop renal excreted drugs • Catheterise (relieve retention /accurately monitor fluid balance) or flush catheter • Treat cause e.g. fluids for pre-renal, relieve obstruction for post-renal	• Treatment-dose clexane if PE likely • MONAC + Cardiology referral if MI • Analgesia • Oxygen	• Treat cause • Sit up • Oxygen/saline nebs/ salbutamol nebs/ chest physio • Treatment-dose clexane if PE likely	• Treat cause (e.g. antibiotics if infection) • Airway placement if GCS <8 • Suspend/reverse any causative drugs e.g. opiates

Other common bleeps include: Assess critically unwell patients (see OSCEstop ABCDE notes); Review blood results or chest x-rays (see OSCEstop interpretation notes); Clerking a new admission (see OSCEstop admission clerking notes); Clerk a patient for operation the following day (see OSCEstop pre-op assessment notes); Post-operative complications (see OSCEstop post-op complications notes); Fluid prescriptions (see OSCEstop fluids notes); Narrow therapeutic range drug prescriptions (see OSCEstop monitoring narrow therapeutic range drugs notes)