

JMO Teaching The Deteriorating Patient

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July 2022

When to Call ICU ?

- Who has called ICU/HDU registrar before?
- How did you do it / what was your experience

- 44181, 44648

ICU Referrals

- These are disturbances in vital signs generally
- Time of day does not matter
- The preparation of your spiel does not matter
- Waiting for blood results or radiology reports does not matter
- ICU reviews happen quickly, 30-60min for a consult or activate a CODE BLUE, 2 -4 minutes

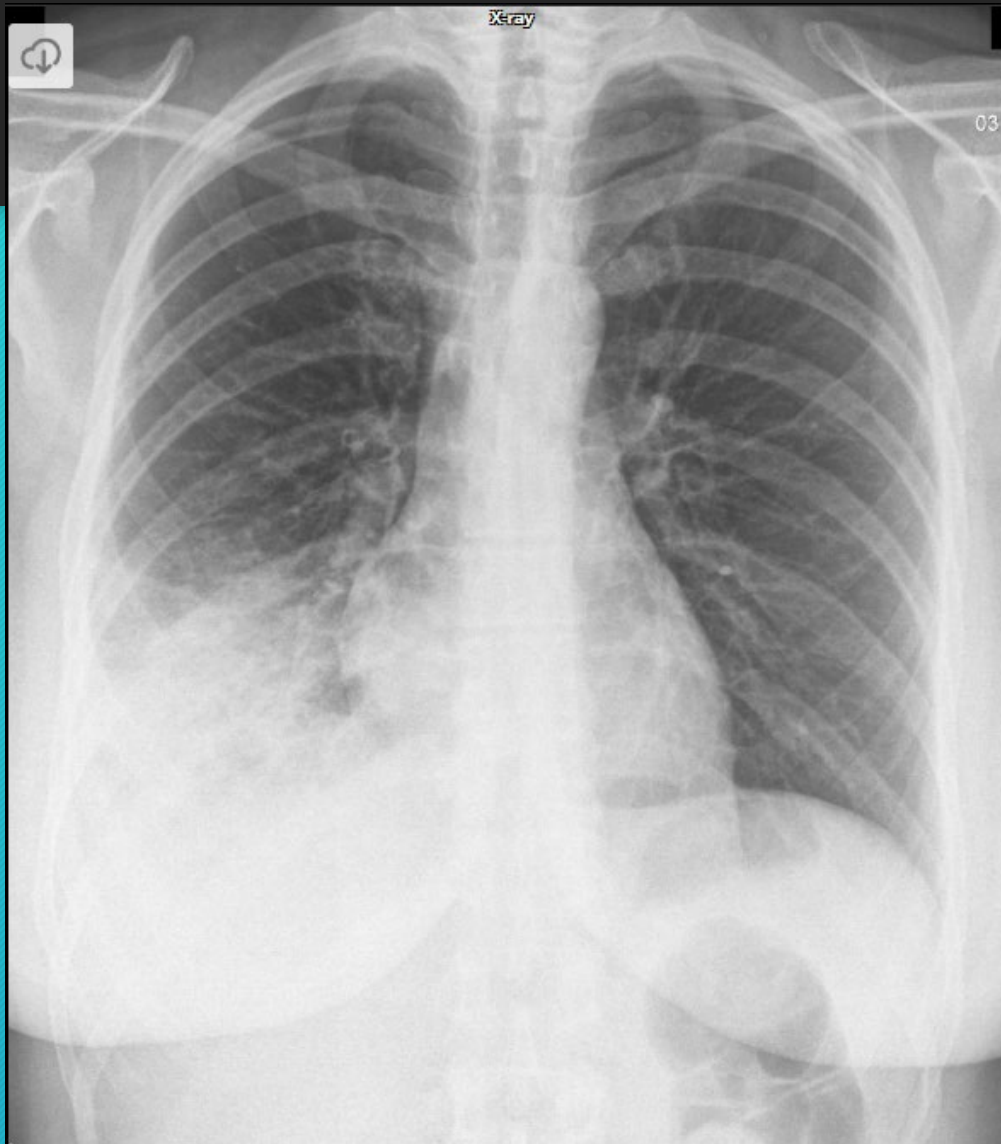
So what can you do to help?

- Know your patient - REALLY WELL
- Notice trends in vital signs - shock index, “in the sh*t” sign
- Recognise key indicators of shock - Not on the obs chart*
- Peripheral perfusion of the skin, GCS, UO, Lactate
- Have good IV access, repeat blood tests if a clinical change
- Communicate clearly and early, escalate if worried
- Ensure therapies are given appropriately - IVABs, AEDs
- Do not do anything youre not comfortable doing - call for help

Case 1 - Patricia, 76yo F

- Hemicolectomy 2 days ago under Colorectal Sx
- PMHx - Smoker, COPD
- Not participating in physio today, unable to sit out of bed, nursing staff has had to transition to Hudson mask 6 → 8 → 10L/min O₂ to maintain SPO₂ > 92%
- On review she is obtunded, GCS 13, E3V4M6
- Resp rate 35-40 bpm
- Clammy skin

CXR



What do you do?

- Call ICU urgently, Bloods and Cultures, IVAbs for HAP, COPD therapies (steroids, bronchodilators), inform surgeons
- Haemodynamic resuscitation - MAP > 65, U/O > 0.5ml/kg/h
- Improve oxygenation → HFNO, NIV, Mechanical Ventilation
- Inform the family, potential to require intubation
- Consider advanced imaging once stable - CT chest, CTPA

What actually happens:

- You call the respiratory registrar whos in clinic
- You call the ID registrar whos too busy to see the patient
- You call your CRSx registrar whos operating and cant leave
- The nursing staff get increasingly stressed at you
- You eventually call the ICU/HDU pager number on your lanyard at 5pm
- Patient has a respiratory arrest as ICU arrives into the room

SIM Resp Arrest

Case 2 - Barry, 54 yo M

- Just arrived to 2N from ED small volume bright red blood from the mouth
- He has been unwell with a cough for several days, vomiting occasionally. He has been more breathless. Smokes 20/day
- He has continued to drink his usual goon bag each day
- Nurses call you because BP 80/40, P 130 AF w RVR
- Whats going on?

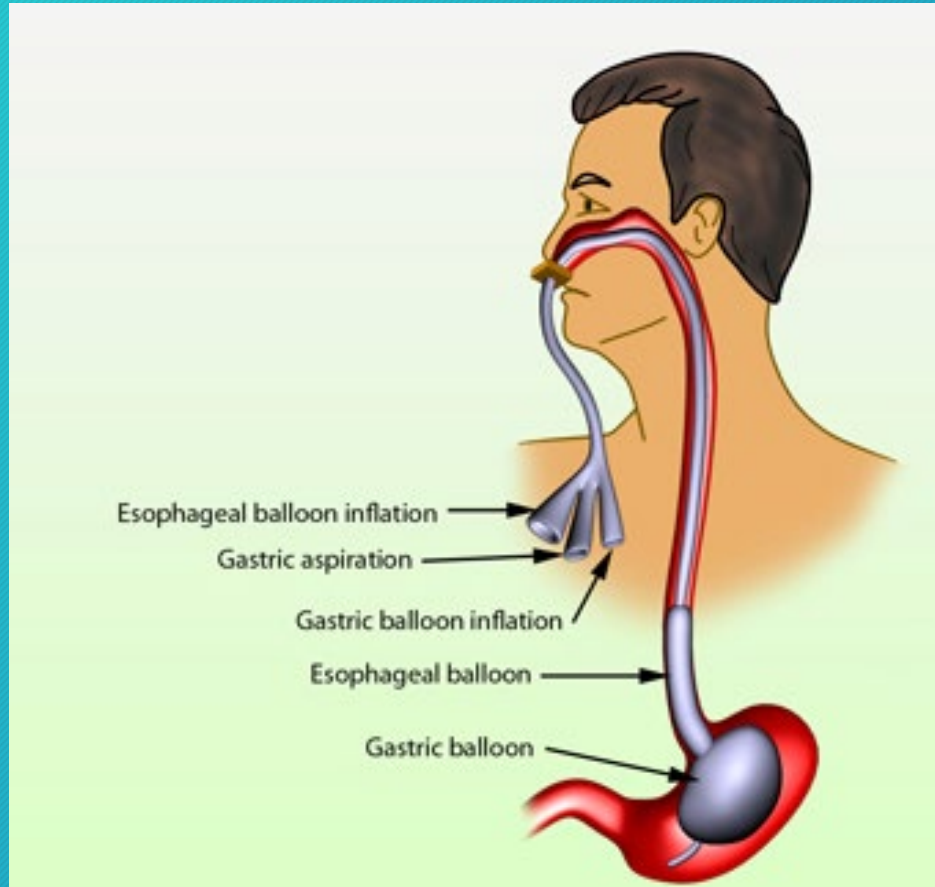
Differentials - Blood from mouth and low BP

- Haematemesis - Varix, PUD, AVM, MW tear, boerhaave
- Haemoptysis - PE, bronchitis, CAP, malignancy
- Coagulopathy - spontaneous mucosal haemorrhage 2nd thrombocytopenia

UGIB

- How do you manage an UGIB on the ward ?
- Large bore IV Access - Bloods, VBG run urgently @ POC, IV PPI
- Haemostatic resuscitation - PRBCs, Platelets (room temp), 1g TXA
- Early discussions with gastro, ICU, family
- Intermittent vasopressor use on ward - 0.5mg Metaraminol IV
- Varix specific bleeding - Airway management, Minnesota Tube, Terlipressin, Octreotide
- NB - avoid crystalloid use > 500ml

Minnesota / SB Tube for Variceal Haemorrhage

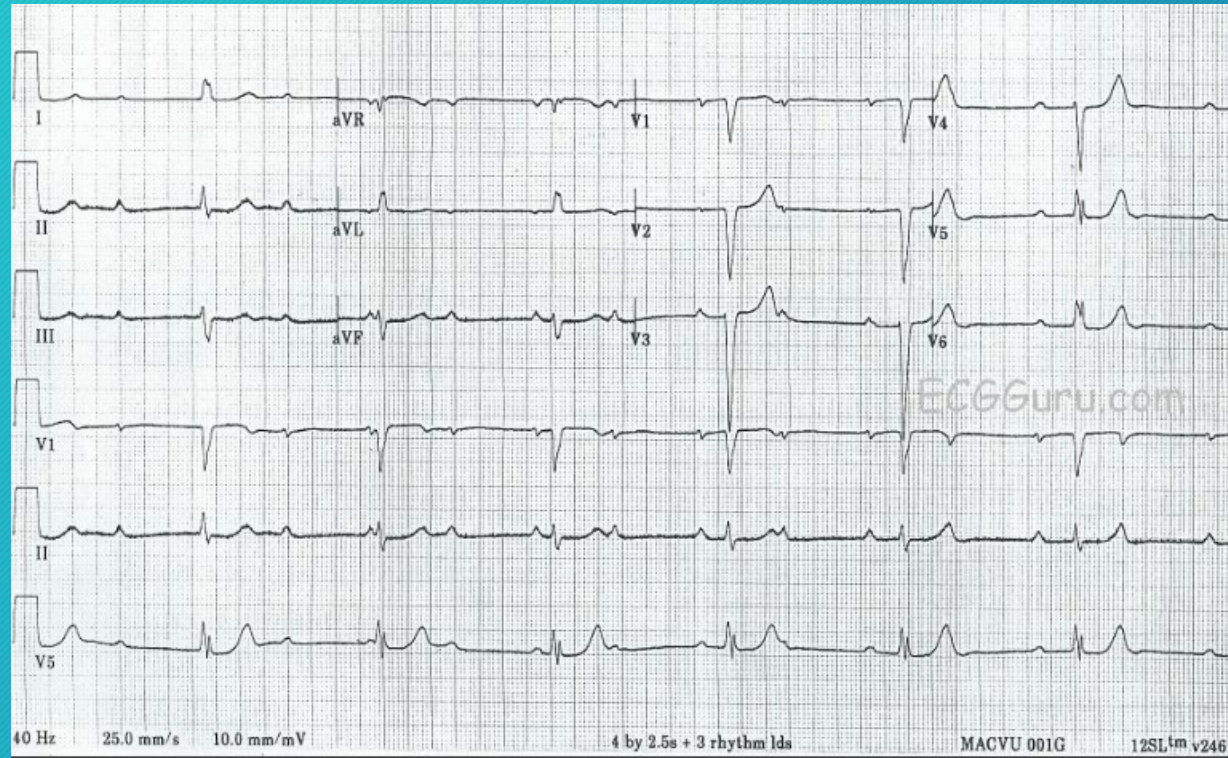


Case 3 - Ben 31 yo M

- Transferred to 3S from CTICU, underwent TV, MV and AV replacements 7 days ago.
- Nurses call you regarding a new bradycardia 35bpm
- Pt has been receiving amiodarone, metoprolol enterally
- Pacing wires remain in situ due to high INR, warfarinised

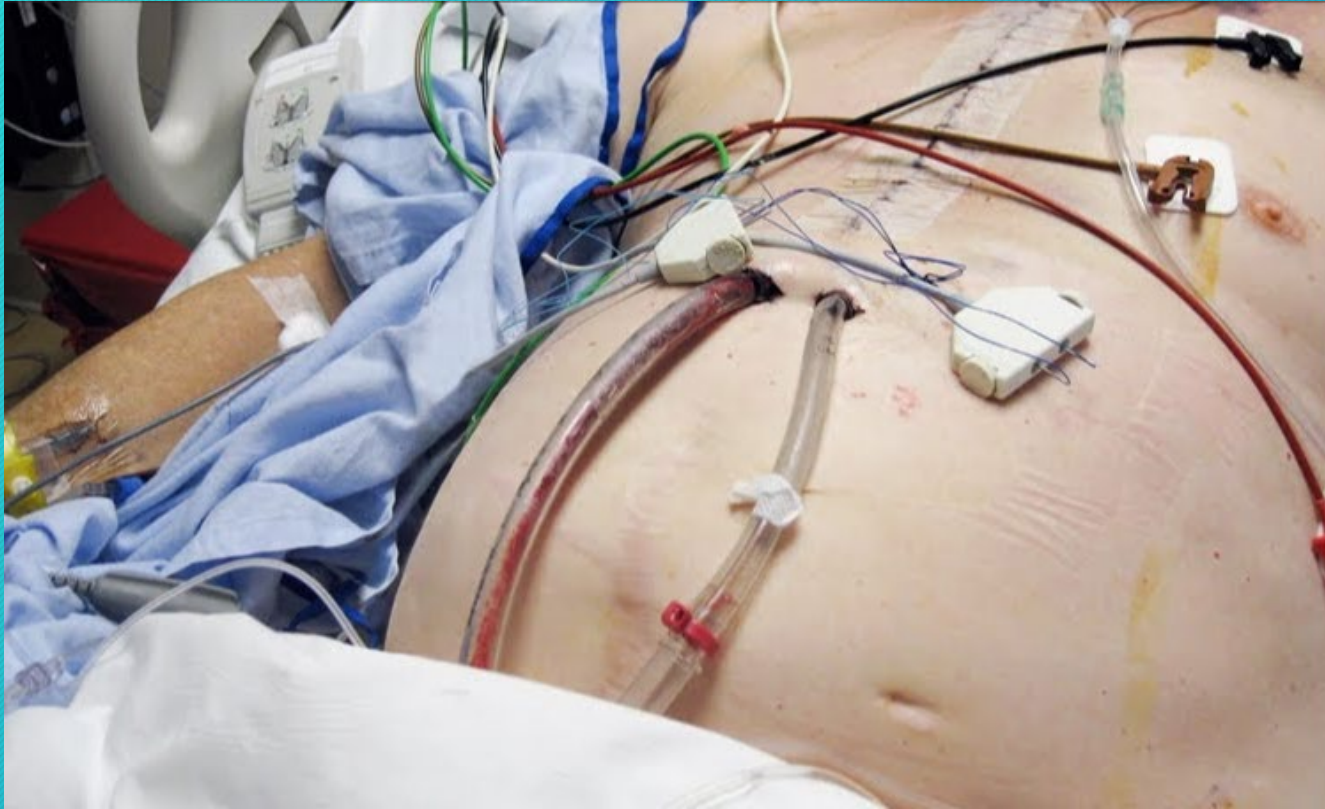
On review, Ben is alert and oriented with a blood pressure of 70 systolic, icy cold peripheries, no UO for 3 hours via IDC

How do you manage Ben?



Complete Heart Block

- Optimise electrolytes, stop bradycardic meds
- Chemical or Electrical Pacing is key
- Isoprenaline, Dobutamine, Adrenaline
- Transcutaneous pacing, Transvenous pacing, epicardial pacing, PPM
- This patient has epicardial pacing wires - so USE them



Case 4 - Leyla, 70yo F

- Admitted with stroke syndrome for urgent ECR 2/7 ago
- RNs have noticed patient unresponsive to voice
- On your review she has increased tone, extends to pain, making puffing noises with cheeks with a slow respiratory rate, eyes wont open

How do you manage?

- ABCDEFG - Check the SUGAR, CO2
- Key neuro signs - gaze, pupils, pain response
- Code Blue
- Maintain an open airway with adjuncts and NRM
- Safe transport to repeat neuroimaging (ie an airway person)
- Reversal of sedatives