Peri-Operative Complete Heart Block

REMEMBER THE 3Rs

RECOGNISE

Independent atrial and ventricular impulses -> P wave and QRS complexes not associated

Broad (ventricular) OR narrow (junctional) QRS complexes at <60bpm

RISK STRATIFY

Consider the patient as UNSTABLE and requiring EMERGENT treatment if any of HISS:

- Hypotension
- Ischaemia
- Shock
- Syncope/reduced GCS

RESPOND

Request “Emergency trolley” for:

- Atropine 600mcg (maximum 3mg)
- Adrenaline 1-10mcg/minute
- Transcutaneous pacing via Lifepak defibrillator
- Epicardial pacing via Biotronik box (SEE OVER)

With post-operative wires in-situ, epicardial pacing should be the default response
Emergency VVI Epicardial Pacing

1. Screw tighten the blue leads to the patient’s ventricular wires.
2. Push the pins of the blue leads into the Ventricle (V- / V+) ports on the pacing box.
3. Set the Rate dial to 80ppm.
4. Set the Ventricle Sens. dial to 2mV.
5. Select VVI via the Mode dial to activate the pacing box.
6. Set the pacing amplitude with the Ventricle Ampl. dial to 7V and increase to capture.

Monitor for consistent capture at 80bpm, **then seek help immediately**
Emergency VVI Epicardial Pacing for Complete Heart Block

1. Connect the ventricular wires to ventricular channel connection (patient’s left and lower)
2. Set the pacing amplitude for ventricle with the Ventricle Ampl. control dial to max (17V)
3. Set the pacing rate with the Rate control dial to 80ppm
4. Turn the ventricular sensitivity down to 1mV with the Ventricle Sens. control dial
5. Activate the pacer by choosing VVI mode via the Mode dial
6. Ventricle Pace yellow LED will flash in synchrony with pacing pulses
7. Monitor the 3-lead ECG for consistent capture at 80bpm, then seek help immediately