BRADYCARDIA MANAGEMENT ALGORITHM

AIRWAY
Open, maintain and protect as necessary

BREATHING
Administer oxygen if required. Target Saturation 94-98%
Ventilate if necessary

CIRCULATION
Assess pulse, blood pressure and perfusion
Attach ECG monitor, pulse oximeter and vital signs monitor if available

DRIP
Establish IV access

ECG RHYTHM
Run rhythm strip to confirm dysrhythmia
12 lead ECG if possible
Identify and treat underlying causes

SIGNOS OF INSTABILITY
• Hypotension
• Acutely altered mental state
• Signs of shock
• Ischaemic chest discomfort
• Acute heart failure

ADULT

BRADYCARDIA
HR < 50/min

IF UNSTABLE

ATROPINE
(Exclude Hypoxia/Hypothermia/Head injury)
0.5 mg IV bolus Can repeat every 3 – 5 minutes, up to 3 mg

ADRENALINE
(0.05μg/kg/min – 0.5 μg/kg/min infusion) OR TRANS Cutaneous PACING

Alternatives
• Transvenous pacing
• High dose Insulin (1 U/kg if BB or CCB)
• Glucagon (if BB or CCB overdose)

Look for and treat contributory causes of Bradycardia
• Hypoxia
• Hypothermia
• Head Injury
• Hyperkalaemia
• Heart Block
• Hydrogen Ion (Acidosis)
• Hypotension
• Toxins (e.g. organophosphates)
• Therapeutic Agents (e.g. beta blocker overdose/calcium channel blocker overdose)

PAEDIATRIC

BRADYCARDIA
HR < 60/min despite effective oxygenation and ventilation

IF UNSTABLE

START CPR
1 Rescuer = 30 compressions : 2 breaths
2 Rescuers = 15 compressions : 2 breaths

ADRENALINE
0.1 ml/kg IV of 1:10 000 dilution (Max - 1 mg) every 3 - 5 minutes

ATROPINE
0.02 mg/kg IV if vagal tone or 1° AV block
Maximum 0.5mg

CONSIDER PACING

* BB = Beta Blockers
* CCB = Calcium Channel Blockers

SPECIALIST MEDICAL ADVICE SHOULD BE SOUGHT WHENEVER POSSIBLE

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