

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

**SPECIALIST MEDICAL ADVICE
SHOULD BE SOUGHT
WHENEVER POSSIBLE**

SIGNS 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

TRANSCUTANEOUS PACING

Alternatives

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

* BB = Beta Blockers

* CCB = Calcium Channel Blockers

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

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)