Management of Heart Block & Brady-Arrhythmias

Symptomatic bradycardia identified
Look for cause but do not delay treatment
Establish airway +/- assist breathing
Monitor HR /rhythm/BP
Establish IV/IO Access

IF NO PALPABLE PULSES FOLLOW APLS PEA/ASYSTOLE ALGORITHM

HYPOXIA Shock or Hypotension Present

YES → **Treat hypoxia and shock ABC**

NO → **SEEK HELP SORT 02380 7755022**

VAGAL STIMULI

YES → **REMOVE VAGAL STIMULI**

Primary Bradycardia

ATROPINE 20 mcg/kg

IF NO RESPONSE → **Secondary Bradycardia**

ADRENALINE 10 mcg/kg
0.1mls/kg of 1/10,000

NO → **Secondary Bradycardia**

ADRENALINE 10 mcg/kg
0.1mls/kg of 1/10,000

Definitions	
Age (years)	Heart Rate (beats/min)
0-3	< 100
3-9	< 60
9-16	< 50
Primary Bradycardia	**Secondary Bradycardia**
Congenital or acquired conduction system abnormalities	Caused by non-cardiac problems and most common causes in children
Myocarditis Surgical injury Cardiomyopathy CHD	*Hypoxia Acidosis Hyperkalaemia Hypothermia*

IF SHOCKED INTUBATE AND VENTILATE
PRINT SORT DRUG CALCULATOR

Consider transcutaneous pacing (using defibrillator)

CAN USE THIS IN A SHOCKED BUT AWAKE CHILD

Use age appropriate pads and set defibrillator to *pacing mode*
Set age appropriate pacing (heart) rate
Increase pacing output until electrical capture achieved (Broad QRS)
Feel central pulse (evidence of mechanical capture)
Once electrical capture achieved increase output by 10mA
Consider intubation and ventilation if required
Pacing Video available here

Drug therapies

Atropine	• Minimum dose: 100 micrograms • Maximum dose: 600 micrograms • Repeat every 5 min
Adrenaline	• Diluted doses as per SORT drug calculator • Then commence infusion (see SORT drug calculator)
Isoprenaline (See SORT drug calculator)	**NEONATES** • 0.02-0.2micrograms/kg/min **CHILDREN** • 1micrograms/kg/min