

3 Bradycardia – Unstable

HR < 50 bpm with hypotension, acutely altered mental status, shock, ischemic chest discomfort, or acute heart failure

START

- 1 Call for help and a code cart**
 - ▶ **Ask:** “Who will be the crisis manager?”
- 2 Turn FiO₂ to 100%**
 - ▶ Verify oxygenation/ventilation adequate
- 3 Give atropine**
- 4 Stop surgical stimulation** (if laparoscopy, desufflate)
- 5 If atropine ineffective:**
 - ▶ Start epinephrine or dopamine infusion
 - or –
 - ▶ Start transcutaneous pacing
- 6 Consider...**
 - ▶ Turning off volatile anesthetics if patient remains unstable
 - ▶ Calling for expert consultation (e.g., Cardiologist)
 - ▶ Assessing for drug induced causes (e.g., beta blockers, calcium channel blockers, digoxin)
 - ▶ Calling for cardiology consultation if myocardial infarction suspected (e.g., ECG changes)

DRUG DOSES and treatments

Atropine: 0.5 mg IV, may repeat up to 3 mg total
Epinephrine: 2 – 10 mcg/min IV
– or – Dopamine: 2 – 10 mcg/kg/min IV

OVERDOSE treatments

Beta-blocker: Glucagon: 2 – 4 mg IV push
Calcium channel blocker: Calcium chloride: 1 g IV
Digoxin: Digoxin Immune FAB; consult pharmacy for patient-specific dosing

TRANSCUTANEOUS PACING instructions

1. Place pacing electrodes front and back
2. Connect 3-lead ECG from pacing defibrillator to the patient
3. Turn monitor/defibrillator to PACER mode
4. Set PACER RATE (ppm) to 80/minute (adjust based on clinical response once pacing is established)
5. Start at 60 mA of PACER OUTPUT and increase until electrical capture (pacer spikes aligned with QRS complex)
6. Set final milliamperes 10 mA above initial capture level
7. Confirm effective capture
 - Electrically: assess ECG tracing
 - Mechanically: palpate femoral pulse (carotid pulse unreliable)

Critical CHANGES

If **PEA** develops, go to ▶ CHLST 4

During RESUSCITATION

Airway: Assess and secure
Circulation:

- Confirm adequate IV or IO access
- Consider IV fluids wide open