

SECTION: C-07

TITLE: Adult Bradycardia

REVISED: November 1, 2019

When possible, a 12-lead may be helpful in determining origin of the rhythm.

BLS-SPECIFIC CARE: See Adult General Cardiac Care/ACS Protocol C-3

AEMT/O.M. Specific Care: See Adult General Cardiac Care/ACS Protocol C-3

ALS-SPECIFIC CARE: See Adult General Cardiac Care/ACS Protocol C-3

For hemo-dynamically **UNSTABLE** patients presenting with bradycardia:

Cardiac Pacing: Perform immediate transcutaneous pacing (TCP)

- Start at 80 ppm and 30 mA, titrate to mechanical capture
- Consider administering Atropine 0.5mg IV/IO while preparing TCP (nothing should delay TCP in an unstable patient)
- Consider sedation/analgesia with transcutaneous pacing if it will not cause unnecessary delays

Sedation:

- **DO NOT** administer if:
 - Systolic BP < 90 mmHg
 - Low respiratory rate, SpO₂ and/or diminished mental status
- Midazolam (Versed) IV/IM/IO:
 - IV/IO/IM: 0.5-2.5 mg slow IV push every 5-10 minutes (max dose 5 mg)
 - IN: 2.5 mg every 10 minutes (max dose of 5 mg)

Analgesia:

- **DO NOT** administer/discontinue administration if:
 - Systolic BP < 90 mmHg
 - Respiratory rate, SpO₂ and/or mental status diminishes
- Fentanyl IV/IO/IM/IN
 - 1 mcg/kg initial dose (max initial dose 100 mcg)
 - Give slowly over 2 minutes (with the exception of IN route)
 - May repeat every 10 minutes as needed (max total dose of 200 mcg)
- Morphine sulfate IV/IM/IO
 - 0.1 mg/kg as initial dose (max initial dose 10 mg)
 - Give slowly over 2 min
 - May repeat every 10 minutes as needed with 0.05 mg/kg (max dose of 20 mg)

Protocol C-07

ADULT BRADYCARDIA

- *Dilaudid IV/IM:*
 - *Adult Only: 0.5 mg slow IV push over 2-3 minutes. Repeat every 10 minutes PRN max of 2 mg.*

For the treatment of the adult with symptomatic and unstable bradycardia, chronotropic drug infusions are recommended as an adjunct to pacing.

Vasopressors: For bradycardia or hypotension unresponsive to other therapies

Epinephrine infusion:

- **IV Infusion:** IV/IO: 0.05-1 mcg/kg/min , titrate for effect
 - **For refractory Cases**
 - **To Mix:** 1 mg epinephrine in 250 cc NS bag

Dopamine infusion:

- **IV Infusion:** IV/IO: 5-20 mcg/kg/min, titrate for effect

For hemodynamically **STABLE** patients presenting with symptomatic bradycardias, pharmacologic therapy is indicated.

Atropine sulfate:

- Not indicated for complete and high degree heart blocks
 - IV/IO: 0.5 mg as needed every 3-5 minutes
 - Maximum total dose 3 mg
 - Maximum total dose of 0.04 mg/kg for morbidly obese patients