

**Base Hospital Contact: Required for all patients with symptomatic bradycardia.**

1. Assess airway and initiate basic and/or advanced airway maneuvers prn ([MCG 1302](#))
2. Administer **Oxygen** prn ([MCG 1302](#))
3. Initiate cardiac monitoring ([MCG 1308](#))  
Assess cardiac rhythm and obtain 12-lead ECG
4. If cardiac chest pain/STEMI suspected as cause of bradycardia, treat in conjunction with [TP 1211, Cardiac Chest Pain](#)
5. Maintain supine for patients with signs of poor perfusion, if respiratory status allows
6. Establish vascular access ([MCG 1375](#))  
Do not delay transcutaneous pacing (TCP) if indicated for vascular access
7. For suspected hyperkalemia ④  
**Calcium Chloride 1gm (10mL) slow IV/IO push**, may repeat x1 for persistent symptoms  
**Albuterol 5mg (6mL) via neb**, repeat continuously until hospital arrival  
**CONTACT BASE** for obtain order for **Sodium Bicarbonate 50mEq (50mL) slow IVP** ⑤
8. For poor perfusion:  
**Atropine 0.5mg (5mL) IV/IO push**, repeat every 3-5 min prn, maximum total dose 3mg  
If IV cannot be rapidly established or if HR  $\leq$  40bpm in 2<sup>nd</sup> degree type II or 3<sup>rd</sup> degree heart block, proceed immediately to transcutaneous pacing ①  
If no improvement after initial dose of **Atropine**, proceed to TCP
9. **TCP** for HR  $\leq$  40 with continued poor perfusion ([MCG 1365](#))  
Recommended initial settings: rate 70bpm/0mA, slowly increase mAs until capture is achieved ②  
**CONTACT BASE** concurrent with initiation of TCP  
  
If TCP will be utilized for the awake patient, consider sedation and analgesia  
For sedation:  
**Midazolam 2mg (0.4mL) slow IV/IO push or IM/IN**  
May repeat every 5 min, maximum total dose prior to Base contact 6mg  
For pain management: refer to [MCG 1345, Pain Management](#)  
  
**CONTACT BASE** for additional sedation and/or pain management after maximum dose administered: May repeat as above to a maximum dose of Midazolam 10 mg, and Fentanyl 250mcg or Morphine 20mg
10. For signs of poor perfusion with HR > 40:  
**CONTACT BASE** to discuss appropriateness of TCP
11. For persistent poor perfusion after initiating TCP:  
**CONTACT BASE** to obtain order for **Normal Saline 1L IV/IO rapid infusion** and/or **Push-dose Epinephrine**

While infusing **Normal Saline**, reassess after each 250 mL increment for evidence of volume overload (pulmonary edema); stop infusion if pulmonary edema develops

**Push-dose Epinephrine** – mix 9mL Normal Saline with 1mL Epinephrine 0.1mg/mL (IV formulation) in a 10mL syringe. Administer **Push-dose Epinephrine (0.01mg/mL) 1mL IV/IO** every 1-5 min as needed to maintain SBP > 90mmHg ③

12. For suspected overdose, treat in conjunction with [TP 1241, Overdose/Poisoning/Ingestion](#)
13. For nausea or vomiting:  
**Ondansetron 4mg ODT/IV/IM**, may repeat x1 in 15 min prn ⑥

**SPECIAL CONSIDERATIONS**

- ① In patients with 2<sup>nd</sup> degree type II or 3<sup>rd</sup> degree heart block, atropine is unlikely to produce clinical improvement, therefore TCP should not be delayed for atropine administration.
- ② Electrical capture can occur without mechanical capture. Assess for electrical capture by reviewing the rhythm strip for a QRS complex and a T wave after each pacer spike. Assess for mechanical capture by palpating a pulse with each QRS complex.
- ③ **Push-dose Epinephrine** is appropriate for non-traumatic shock including cardiogenic shock. Additional doses beyond 10mL may need to be prepared for prolonged transports.
- ④ Patients at increased risk for hyperkalemia include those with history or clinical evidence of renal failure, missed dialysis or patients taking potassium-sparing diuretics such as spironolactone. ECG signs of hyperkalemia included peaked T-waves, wide QRS, bradycardia, long PR interval and absent P-waves.
- ⑤ Sodium Bicarbonate is another rapid-acting treatment for suspected hyperkalemia. Due to the risk of pulmonary edema, contact Base to discuss administration.
- ⑥ Nausea and vomiting cause vagal stimulation, which can worsen bradycardia. Ondansetron may be administered to reduce potential for nausea or vomiting.