

Bradycardia; Pulse Present

History

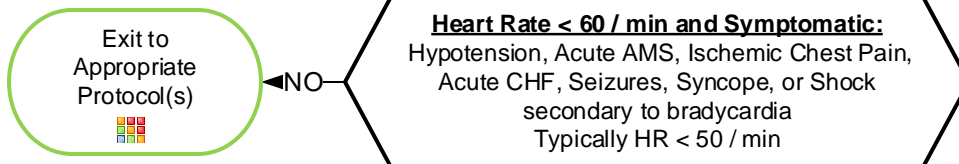
- Past medical history
- Medications
 - Beta-Blockers
 - Calcium channel blockers
 - Clonidine
 - Digoxin
- Pacemaker

Signs and Symptoms

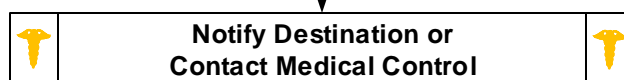
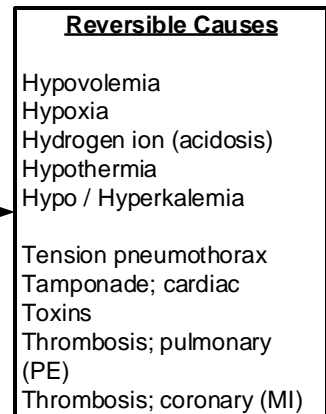
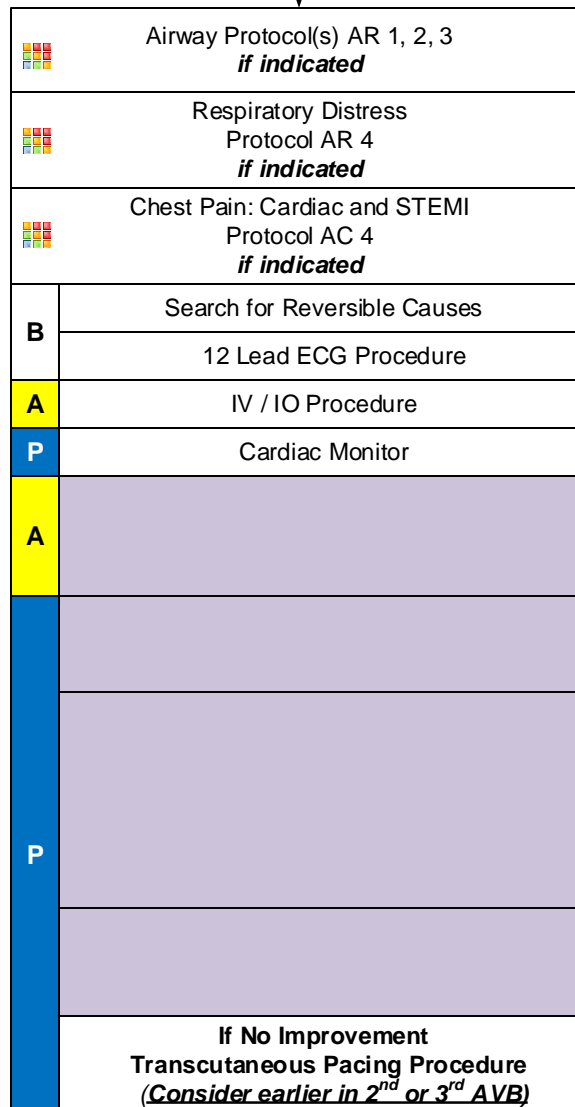
- HR < 60/min with hypotension, acute altered mental status, chest pain, acute CHF, seizures, syncope, or shock secondary to bradycardia
- Chest pain
- Respiratory distress
- Hypotension or Shock
- Altered mental status
- Syncope

Differential

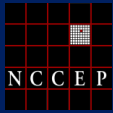
- Acute myocardial infarction
- Hypoxia / Hypothermia
- Pacemaker failure
- Sinus bradycardia
- Head injury (elevated ICP) or Stroke
- Spinal cord lesion
- Sick sinus syndrome
- AV blocks (1°, 2°, or 3°)
- Overdose



YES



Adult Cardiac Protocol Section



Bradycardia; Pulse Present

Pearls

- **Recommended Exam: Mental Status, Neck, Heart, Lungs, Neuro**
- **Identifying signs and symptoms of poor perfusion caused by bradycardia are paramount.**
- **Rhythm should be interpreted in the context of symptoms and pharmacological treatment given only when symptomatic, otherwise monitor and reassess.**
- **Consider hyperkalemia with wide complex, bizarre appearance of QRS complex, and bradycardia.**
- **Hypoxemia is a common cause of bradycardia. Ensure oxygenation and support respiratory effort.**
- **Atropine**
 - Do NOT delay Transcutaneous Pacing to administer Atropine in bradycardia with poor perfusion. Caution in setting of acute MI. Elevated heart rate can worsen ischemia.
 - Ineffective and potentially harmful in cardiac transplantation. May cause paradoxical bradycardia.
- **Transcutaneous Pacing Procedure (TCP)**
 - Utilize TCP early if no response to atropine. If time allows transport to specialty center because transcutaneous pacing is a temporizing measure. Transvenous / permanent pacemaker will probably be needed.
 - Immediate TCP with high-degree AV block (2d or 3d degree) with no IV / IO access.
- Consider treatable causes for bradycardia (Beta Blocker OD, Calcium Channel Blocker OD, etc.)