

Bradycardia Algorithm

With a pulse

Circulation. 2005; 112:IV-67 – IV-77

See ACLS Notes

Bradycardia

1. HR < 50 AND
 - Inadequate for clinical situation

First Steps: Identify and treat underlying causes

1. Maintain patent airway
 - Noninvasive airway maneuvers
2. Assist breathing as needed
3. Administer Oxygen (if hypoxemic)
4. Monitor
 - ECG (12 lead if available, identify rhythm, do not delay therapy)
 - Blood pressure
 - Oximetry (pulse ox)
5. Establish IV access

Persistent bradyarrhythmia causing

- Altered mental status (acute)
 - Ongoing ischemic chest pain/discomfort
 - Hypotension
 - Other signs of shock
 - Acute heart failure
1. NO
 - **Monitor and observe**
 2. YES
 - **Treat as symptomatic bradycardia**

If Poor Perfusion

1. Atropine: 0.5 mg IV (while awaiting pacer)
 - May repeat up every 3 – 5 minutes to a max dose of 3.0 mg
 - If ineffective, begin pacing
2. Prepare for Transcutaneous pacing
 - Use without delay in high-grade block
 - Second degree Type II block
 - Third degree block
3. Consider (while waiting for pacer OR if pacer ineffective)
 - Epinephrine: 2-10 mcg/ min OR
 - Dopamine: 2-10 mcg/kg/ min
4. Treat contributing causes
5. Consider expert consultation

Observe/ Monitor

1. If Pulseless Arrest Develops

- Pulseless Arrest Algorithm
- Search for/ treat possible contributing causes
 - The 6 H's
 - Hypovolemia
 - Hypoxia
 - Hydrogen Ion (acidosis)
 - Hypo/ Hyperkalemia
 - Hypoglycemia
 - Hypothermia
 - The 5 T's
 - Toxins
 - Tamponade (cardiac)
 - Tension pneumothorax
 - Thrombosis
 - Coronary
 - Pulmonary
 - Trauma
 - Hypovolemia
 - Increased ICP

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