

SAN FRANCISCO EMERGENCY MEDICAL SERVICES AGENCY

Effective: 01/01/11
Supersedes: 09/01/06

Protocol: P-014.1

DYSRHYTHMIAS: ADULT SYMPTOMATIC BRADYCARDIA

SUBJECTIVE FINDINGS

See DYSRHYTHMIAS: OVERVIEW Protocol (P014).

The definition of a “symptomatic bradycardia” is a patient with a pulse rate ≤ 60 bpm and any one or more of the following “serious signs or symptoms:”

- SBP < 90 and signs of hypoperfusion;
- AMS, syncope or near syncope due to a decrease in cerebral perfusion;
- Signs/symptoms of CHF;
- Ischemic chest pain unrelieved by NTG.

BLS Treatment	ALS Treatment
<ul style="list-style-type: none">• Assess ABC's, secure airway, administer oxygen.• Assess vital signs and perform secondary survey.• Routine Medical Care.	<ul style="list-style-type: none">• Attach monitor.• IV of NS.• 12-Lead ECG.• Consider Atropine 0.5 mg IVP, may repeat q 3-5 min. to a max dose of 3 mg. See PRECAUTIONS AND COMMENTS.• Transcutaneous pacing (TCP).• Midazolam 5 mg IN (2.5 mg each nostril) or, 2.5 mg slow IV push to a maximum dose of 5 mg (may be repeated every five minutes).• Morphine sulfate 4 mg slow IVP for pain control if needed. See PAIN CONTROL protocol (P-019).• If the heart rate normalizes, but hypotension persists:<ul style="list-style-type: none">- Fluid challenge 500 ml repeat PRN.- Dopamine 5-20 mcg/kg/min. IV infusion to maintain SBP > 90.

DOCUMENTATION

- Vital signs obtained and correct doses of medications administered if indicated.
- Transcutaneous pacing results in HR > 60 .

PRECAUTIONS AND COMMENTS

- If utilizing TCP, verify mechanical capture and patient tolerance. Utilize sedation and analgesia as needed, but use with caution in the hypotensive patient.
- If the patient is symptomatic and one of the following conditions exists, go directly to transcutaneous pacing (TCP):
 1. An IV cannot be established and the patient has serious signs or symptoms;
 2. associated with the bradycardia;
 3. If type II 2nd degree AV block or 3rd degree heart block is noted, or;
 4. If the patient is status-post heart transplant;

SAN FRANCISCO EMERGENCY MEDICAL SERVICES AGENCY

Effective: 01/01/11

Protocol: P-014.1

Supersedes: 09/01/06

5. Otherwise utilize atropine initially and if no response to initial dose, continue;
6. Further doses as outlined above while attaching TCP and utilize pacing as soon as
7. available.