

	COUNTY OF SACRAMENTO EMERGENCY MEDICAL SERVICES AGENCY	Document #	8810.10
	PROGRAM DOCUMENT: Transcutaneous Cardiac Pacing	Initial Date:	01/07/99
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 EMS Medical Director

 EMS Administrator

Purpose:

- A. To serve as a **procedure standard** for an advanced life support skill guideline for utilizing Transcutaneous Cardiac Pacing (TCP).

Authority:

- A. California Health and Safety Code, Division 2.5
 B. California Code of Regulations, Title 22, Division 9

Indications:

- A. In ~~s~~ Symptomatic bradycardia **Bradycardia per Cardiac Dysrhythmias policy PD#8024:**
- ~~adults with a h~~ Heart rate of less than < 50 beats per minute (bpm) and if the following are present: documented by cardiac monitor a
 - Systolic blood pressure less than < 90 mm Hg, AND – if other signs or symptoms of
 - hypoperfusion are present, which may include d **D**ecreased sensorium
 - Diaphoresis
 - Chest pain
 - Capillary refill greater than $>$ two seconds
 - Cool extremities
 - Cyanosis

Relative Contraindication:

Hypothermia – because the bradycardia is usually a physiologic response to the body temperature.

Equipment:

- A. Transcutaneous Cardiac Pacemaker
 B. Cardiac Monitor / Defibrillator
 C. Pacing Electrodes

Procedure:

- A. Assemble the required **necessary** equipment.
 B. Explain the procedure to the patient.
 C. Connect the patient to a cardiac monitor and obtain a 12 lead ECG rhythm strip, if possible, or Lead II rhythm strip.
 D. ~~Obtain baseline vital signs.~~

- E. ~~Apply pacing electrodes (avoid large muscle masses) and attach the pacing cable and pacing device, per manufacturer's recommendations.~~ **Cardiac Monitoring per Cardiac Dysrhythmias policy, PD #8024**
- F. Select the pacing mode to asynchronous or non-demand mode.
- G. Set the pacing rate to 80 bpm.
- H. Increase the milliamps (mA) to mechanical capture or lowest setting possible. Activate the pacing device and increase the milliamps as tolerated. Observe the patient and ECG until mechanical capture is achieved. Mechanical capture is the point when the pacemaker produces a pulse with each QRS complex.
- I. If needed, provide for patient sedation as described in the Cardiac Dysrhythmias Policy, PD #8024.
- J. Obtain rhythm strips as appropriate.
- K. Continue monitoring the patient and anticipate further therapy.

Special Notes:

- A. Symptomatic Type II 2nd degree blocks and 3rd degree blocks should have TCP implemented without delay.
- B. ~~The conscious patient may experience some pain or discomfort with TCP, which is directly correlated to the intensity of muscle contractions and the amount of applied milliamps.~~
- C. ~~Any physical contact with the patient by rescuers while TCP is activated may cause the rescuer to experience an occasional tingling or muscle twitching.~~

Cross Reference: Cardiac Dysrhythmias, PD #8024
Overdose and/or Poisoning, PD #8018