
TRANSCUTANEOUS PACING - TCP

1. **INDICATIONS:** This procedure should be used on patients experiencing symptomatic bradycardia (see Adult and Pediatric Bradycardia - #7225 and #7315). This includes patients with "failed" pacemakers. Note: Bradydysrhythmias in children are usually due to respiratory causes

Consider alternate causes of the dysrhythmia and treat appropriately prior to initiation of TCP:

- ▶ Hypoxia
- ▶ Trauma
- ▶ Drug overdose
- ▶ Electrolyte imbalance (not treatable in the field setting)
- ▶ Hypothermia

2. **RELATIVE CONTRAINDICATIONS** - unless approved by the Base Physician

In general, TCP is not effective in:

- 2.1 Asystole
- 2.2 Bradyasystolic arrest

3. TCP should not be delayed pending IV access or while waiting for atropine to take effect in an unstable patient. TCP should be initiated simultaneously with atropine in this setting

4. **PROCEDURE:**

- 4.1 Consider administering midazolam (see sedation procedure) and/or morphine sulfate 1-2 mg IV. Decrease dose of one or both agents with concomitant midazolam administration or age > 65
- 4.2 If unable to start IV, consider administering IM
- 4.3 Place pads on the patient's chest and back
- 4.4 Set initial TCP rate at 80 beats per minute (bpm)
- 4.5 Begin output at 0 milliamps (mA). Increase by 10 mA until capture/pulses are noted. Once capture is confirmed, continue pacing at a slightly higher output level (10%)
- 4.6 If capture is maintained but the patient remains symptomatic of inadequate tissue perfusion (BP < 90 systolic, altered level of consciousness) consider increasing **the rate** by 10 bpm until 100 bpm is reached
- 4.7 If perfusion remains a problem, consider dopamine. **Contact the Base Physician for consultation if perfusion remains a problem and/or alteration of TCP settings**