TRANSCUTANEOUS PACING (TCP)

I. INTRODUCTION

A. The authorization of transcutaneous pacing is at the sole discretion of the Medical Direction Authority and must be appropriately documented when used.

II. INDICATIONS

A. Hemodynamically unstable bradydysrhythmias that are:

1. Unresponsive to Atropine OR
2. When IV/IO access may be delayed/unavailable OR
3. Bradycardia in heart transplant patients.

III. CONTRAINDICATIONS

A. Severe Hypothermia

B. Asystole

IV. PROCEDURE

A. Identify an indication for transcutaneous pacing.

B. Place pacing electrodes on the chest according to package instructions.

C. Turn the pacer ON.

D. Set the rate to 60 beats per minute. (The rate can be adjusted “up” or ”down” based on the patient’s clinical response after pacing is established).

E. Obtain control of the heart by increasing the milliamps (mA) in small increments (5 – 10 mA) until electrical capture is achieved.

F. Confirm mechanical capture by checking for pulses, changes in the QRS complex with a tall broad T wave that immediately follows a pacer spike and a rise in end tidal CO_2, if so equipped.

G. Consider sedation/analgesia, unless the delay will contribute to patient deterioration.

Special Note: most sedation/analgesia medications worsen hypotension.

H. Monitor the patient’s rhythm

I. Monitor patient.

V. SPECIAL CONSIDERATIONS

A. Pain Control: This procedure can be painful.
Consider:

1. Midazolam or Diazepam for anxiety, sedation or muscle contractions.
2. Morphine Sulfate or Fentanyl for pain/analgesia.
Follow: Pain Management Standing Order

B. Failure to capture pacing

1. Inappropriate electrode placement
2. Insufficient milliamps
3. Extremely large individuals
4. Barrel chested individuals
5. Pericardial effusion and tamponade

VI. COMPLICATIONS

A. Failure to recognize the presence of underlying, treatable ventricular fibrillation (large pacer artifact)

B. Pain

C. Electrical Burns