EXTERNAL PACING (Transcutaneous) **ADMINISTRATIVE 2.3**

I. INTRODUCTION

Use of a Transcutaneous External Pacing device requires Medical Direction. It is at the sole discretion of the base hospital medical director, and must be appropriately documented when used.

II. INDICATIONS

A. Hemodynamically significant brady dysrhythmias and heart blocks unresponsive to Atropine

B. Asystole . . . Early asystolic arrest (<10 mins.) and witnessed asystolic arrest

C. Pulseless Electrical Activity (PEA)

III. CONTRAINDICATIONS

A. Traumatic asystole and brady arrhythmias

B. Non-viable patients per DOA protocol

C. Children weighing less than 15Kg. (33 lbs.)

IV. PROCEDURE

A. Identify the need for transcutaneous external pacing.

1. 3 lead monitor shows a paceable rhythm
2. Vital signs indicate an unstable patient

B.Prepare the patient for the procedure (sedation prn.)

C.Proper placement of pacing pads

D. Select correct output setting (start at 5 milliamps and increase until capture is achieved)

E. Select pacing rate (start at 60 and increase until patient shows signs of perfusion). "Check for pulses, muscle twitching and pacing spikes/QRS complex on the monitor. If not felt; increase amplitude and pacing rate until pulses are found. Do not increase rate above 80/min."

F. Monitor patient's rhythm

G. Monitor patient

V. SPECIAL CONSIDERATIONS

A. Pain Control: This procedure is exceedingly uncomfortable. Consider:

1. Analgesia - morphine sulfate
2. Sedation - diazepam

B.Defibrillation

1. Place defibrillation pads 2 - 3 cms. from pacer electrodes to prevent arching.
2. Put separate pacer units on standby when defibrillating.

C.CPR

1. May perform CPR with pacer electrodes in place without risk.
2. May get muscle stimulation which might make it difficult to palpate pulses.

D. ACLS protocols should be followed

E.Failure to capture pacing

1. Extremely large individuals
2. Inappropriate electrode placement
3. Barrel chested individuals
4. Pericardial effusions and tamponade

VII. COMPLICATIONS

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

B. Induction of dysrhythmia (theoretical)

C. Pain

D. Burns

E. Cardiac damage

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