STANDARDIZED PROCEDURE

TEMPORARY PACER WIRE REMOVAL (Adult, Peds)

These procedures are intended to describe procedures performed by Nurse Practitioners and/or Certified Nurse Midwives (depending on the clinical privileges granted to the individual practitioner) at UC San Diego Health.

I. Definition:

Pacer wires are temporarily placed after all open-heart surgery cases in case of rhythm disturbances in the postoperative period. They are in place to help manage any hemodynamic instability as a result of dysrhythmia. The removal of these wires by the Advanced Health Practitioner (AHP) allows the patient to advance through their postoperative recovery. The purpose of this procedure is to allow the AHP to safely remove temporary pacer wires.

II. Background Information

A. Setting:

The setting (inpatient vs outpatient) and population (adults vs pediatrics) for the Advanced Health Practitioner (AHP) is determined by the approval of the privileges requested on the AHP Privilege Request Form. If the procedure is being done on a Pediatric patient, make sure Child Life Services is involved and use age appropriate language and age appropriate developmental needs with care of children, as appropriate to the situation.

B. Supervision:

The necessity of this procedure will be determined by the AHP in collaboration with the supervising physician or his/her designee. Designee is defined as another attending physician who works directly with the supervising physician and is authorized to supervise the AHP.

Direct supervision will not be necessary once competency is determined, as provided for in the protocol. The AHP will notify the physician immediately upon being involved in any emergency or resuscitative events or under the following circumstances:

1. Patient decompensation or intolerance to the procedure
2. Bleeding that is not resolved
3. Outcome of the procedure other than expected

C. Indications:

The removal of temporary pacer wires will only be done at the request of the attending physician when it is time appropriate

D. Precautions / Contraindications:

Contraindications include rhythm disturbances, unstable hemodynamics which maybe helped with temporary pacing. Precautions include: if the wires cannot be removed with an appropriate amount of force, the AHP will notify the CT- Fellow or Attending and they will remove the wires.

III. Materials

1. 11 blade or scissor
2. Clean gloves

IV. Procedure

A. Pre-treatment evaluation:

Appropriate patients will be identified during rounds with the surgeons.

B. Prepare patient:

1. If age appropriate, explain to the patient and family what you are going to do.
2. Pre-medicate with pain medication.
3. Involve Child Life Services when appropriate

C. Perform procedure:

1. Remove any dressing covering the pacer wire insertion site
2. Remove suture holding wires in place
3. If there are two sets of wires (atrial and ventricular), then they will be removed one at a time.

D. Alternate Technique: to be used in cases where there is a serious coagulopathy, fragile atrial tissue (Ebstein's Syndrome) or if you are unable to pull out wire by other method.

1. Prep the wire and the skin with Chlorhexadine, then pull wire gently and cut the wire at the skin so that the wire will retract under the skin.

E. Post-procedure:

1. Watch for excessive bleeding.
2. Instruct bedside nurses to watch for signs of tamponade in hemodynamic instability.
3. Patient to remain in bed and quiet for a minimum of 2 hours after having the wires removed.

F. Follow-up treatment: If excessive bleeding occurs notify the Intensive Care Unit Attending and the Cardiothoracic Fellow or Attending and complete monitoring orders.

V. Documentation

A. Documentation is in the electronic medical record

1. Documentation of the pretreatment evaluation and any abnormal physical findings.
2. Record the time out, procedure, EBL, the outcome, how the patient tolerated the procedure, medications (drug, dose, route, & time) given, complications, and the plan in the note.

B. All abnormal findings are reviewed with supervising physician.

VI. Competency Assessment

A. Initial Competence

1. The AHP will be instructed on the efficacy and the indications of this therapy and demonstrate understanding of such.

2. The AHP will demonstrate knowledge of the following:

    a. Medical indication and contraindications of temporary pacer wire removal.
    b. Risks and benefits of the procedure
    c. Related anatomy and physiology
    d. Consent process (if applicable)
    e. Steps in performing the procedure
    f. Documentation of the procedure
    g. Ability to interpret results and implications in management.

3. AHP will observe the supervising physician perform each procedure three times and perform the procedure three times under direct supervision.

4. Supervising physician will document AHP's competency prior to performing procedure without direct supervision.

5. The AHP will ensure the completion of competency sign-off documents and provide a copy for filing in their personnel file and a copy to the medical staff office for their credentialing file.

B. Continued proficiency

1. The AHP will demonstrate competence by successful completion of the initial competency.
2. Each candidate will be initially proctored and signed off by an attending physician.
3. AHP must perform this procedure at least three times per year. In cases where this minimum is not met, the attending, must again sign off the procedure for the AHP. The AHP will be signed off after demonstrating 100% accuracy in completing the procedure.
4. Demonstration of continued proficiency shall be monitored through the annual evaluation.
5. A clinical practice outcomes log is to be submitted with each renewal of credentials. It will include the number of procedures performed per year and any adverse outcomes. If an adverse outcome occurred, a copy of the procedure note will be submitted.

VII. RESPONSIBILITY

Please contact the Advanced Practice Council if you need help. The administrative assistant for the Chief Nursing Officer can direct you. Call; 619-543-3438.

VII. HISTORY OF PROCEDURE

Revised by the Committee of Interdisciplinary Practices: 2/26/2014, 9/28/2016
Reviewed by the Medical Staff Credentials Committee: 3/5/2014, 10/6/2016
Approved by the Medical Staff Executive Committee: 3/20/2014, 10/7/2016