## STANDARDIZED PROCEDURE

# **INTRA-AORTIC BALLOON PUMP (IABP) REMOVAL**

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.

- **a.** Function: To remove an intra-aortic balloon pump (IABP)
- **b.** Circumstances:
  - i. <u>Setting:</u> See Cardiothoracic Surgery Nurse Practitioner General Policy Standardized Procedure
  - **ii.** <u>Supervision:</u> See Cardiothoracic Surgery Nurse Practitioner General Policy Standardized Procedure
  - **iii.** Patient Conditions/Indications for IABP Removal include but are not limited to:
    - 1. Successful weaning from augmentation thus not requiring IABP any longer
    - 2. Infection
    - **3.** Loss of distal pulses with risks outweighing benefits of continued IABP use
    - **4.** Post-operative successful heart transplant

#### II. Protocol

- **a.** <u>Definition:</u> IABP removal including but not limited to the above conditions
- **b.** Objective: See section I-b-iii for indications for IABP removal
- **c.** Assessment: Patient which meets criteria as described above in section Ib-iii
- **d.** Plan:
  - i. Equipment Necessary includes but is not limited to:
    - **1.** Sterile prep solution (povidine-iodine, or hexachlorophene if patient is iodine-allergic)
    - 2. 10 cc syringe for aspiration of remaining air in the IABP balloon
    - 3. Iris Scissors
    - **4.** Forceps
    - **5.** 4x4 gauze (5)
    - **6.** Personal protective equipment
  - ii. Pre-procedure
    - 1. Education
      - **a.** Explain the process of removing the IABP and assess patient and family understanding (if patient awake and or family available in person or by phone)

- **b.** Explain the procedure and the amount of time involved
- **c.** Explain the need for remaining in bed following procedure with pressure bag

#### iii. Patient Position

- 1. Place patient in supine position
- **2.** Cleanse area surrounding IABP insertion site with sterile prep
- 3. Don personal protective equipment (mask, gown, gloves)
- **4.** Have nurse turn off IABP
- **5.** Aspirate air from balloon to ensure deflation
- **6.** Cut securing sutures and remove IABP catheter with a single swift pull
- **7.** Immediately place pressure over the insertion site with gauze pads in each hand. One hand is placed proximal to the entry site and one is distal.
- **8.** Release pressure from the distal hand to allow a little back bleeding from the distal vessel to dislodge any clot present
- **9.** Apply pressure with the distal hand and then release pressure from the proximal hand for 1-2 seconds, allowing forward bleeding to dislodge any clots
- 10. Hold manual pressure for a minimum of 30 minutes
- **11.** The patient needs to remain supine with legs extended for 6 hours with a pressure bag at insertion site
- iv. Patient Conditions requiring Physician Consultation (Limitations):
  - 1. Uncontrollable bleeding
  - 2. Limb ischemia of lower extremities
  - **3.** Aortic dissection
  - **4.** Loss of decrease in pulses distal to insertion site
  - **5.** Renal Injury
  - **6.** Thromboembolism
  - 7. Infection
- **v.** Follow Up:
  - 1. Further evaluation and treatment as indicated
  - 2. Monitor pulses regularly
  - **3.** Instruct nursing staff to check distal pulses to insertion site every two hours and prn and to notify House Officer with any changes in assessment
  - **4.** Instruct nursing staff to observe for signs of infection hemorrhage, or ischemia to insertion site or limb
- **e.** <u>Record Keeping:</u> See Cardiothoracic Surgery Nurse Practitioner General Policy Standardized Procedure

#### **III.** Requirements for Nurse Practitioner

**a.** Education and Training: See Cardiothoracic Surgery Nurse Practitioner General Policy Standardized Procedure

**b.** <u>Evaluation:</u> See Cardiothoracic Surgery Nurse Practitioner General Policy Standardized Procedure

### 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.

## VIII. 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