



# Rancho Los Amigos National Rehabilitation Center

## CARDIOLOGY SERVICE POLICY AND PROCEDURE

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**SUBJECT: TRANSESOPHAGEAL ECHOCARDIOGRAM (TEE)**

**Policy No.: Cardiology 3**

**Supersedes: 07/01/2013**

**Revision Date: 07/01/2014**

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### **PURPOSE:**

1. To outline the process for performing a Transesophageal Echocardiogram (TEE).
2. To coordinate the roles and responsibilities of the critical care registered nurse (CCRN)/Physician Assistant (PA), sonographer and cardiologist in the performance of a TEE.

### **POLICY:**

1. A TEE is performed by a cardiologist with the assistance of a registered nurse and sonographer deemed competent to assist the cardiologist..
2. Patient Selection: Indications for a TEE is considered appropriate when a transthoracic echocardiogram (TTE) is insufficient for the evaluation of valvular heart disease, valvular prosthetics, endocarditis, cardiac thrombi or emboli, congenital heart disease, cardiac tumors or masses and cardioversion of patients with atrial fibrillation.
3. Contraindications:
  - a. A TEE should not be performed on individuals with the following::
    - i. Patients with recent GI bleed, tumors, known esophageal varices or gastric ulcer.
    - ii. Patients whose respiratory status is tenuous and may be compromised by the procedure.
    - iii. Patients with altered mental status who cannot follow instructions or comprehend unless they are intubated and can be heavily sedated.
    - iv. Patients who have not been NPO for at least 4 hours.
    - v. Atlantoaxial disease and severe generalized cervical arthritis: TEE should never be performed if there is any question about stability of cervical spine.
  - b. Physician is notified immediately if any patient scheduled for a TEE has any of the above contraindications.

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**EFFECTIVE DATE:** 07/01/14

COUNTY OF LOS ANGELES • DEPARTMENT OF HEALTH SERVICES

**APPROVED BY:** Cesar Aranguri

Signature(s) on File.

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**PROCEDURE**

1. Patient Preparation:
  - a. Patients must be NPO for a minimum of 4 to 6 hours prior to the procedure to minimize the potential risk of aspiration.
  - b. Written, informed consent for the procedure must be obtained. Patients should be informed about the risks of respiratory depression associated with sedative drugs, the risk of vomiting and aspiration, and the possibility of trauma to the oropharynx or the esophagus.
  - c. Supplemental oxygen, suction equipment, monitoring equipment, and a crash cart must be immediately available.
  - d. Prior to the procedure, IV access must be established in all patients.
  - e. IV medications will be administered to achieve mild sedation unless the patient is intubated in which case general anesthesia may be used. The protocol for conscious sedation will be followed for monitoring of patients including pulse oximetry and automatic blood pressure monitoring. (See Rancho Los Amigos National Rehabilitation Center Administrative Policy and Procedure: Sedation Guidelines: Monitoring and Discharge Policy # B815)
  - f. Topical anesthesia to the oropharynx is used to minimize patient discomfort. A variety of topical anesthetic agents can be used, including sprays and lidocaine gargles.
2. Responsibilities of Critical Care Registered Nurse (CCRN):
  - a. Verify that an order for a TEE is written either in the patient's chart or that the patient has a valid prescription prior to the test being performed.
  - b. Introduce yourself to the patient
  - c. Verify the patient's identity via two identifiers.
  - d. Explain the procedure and answer any questions that the patient may have regarding the performance of the test using layman's terms.
  - e. Confirm that informed consent is signed or if not, have the patient read and sign the consent to perform the test.
  - f. Wash hands prior to procedure
  - g. Assess the patency of the I.V. line or start I.V. if outpatient.
  - h. Obtain a baseline ECG rhythm strip and blood pressure. Then the procedure may commence if the physician is present. The CCRN will continue to monitor the patient per the Sedation

i. Guidelines: Monitoring and Discharge Policy # B815.

3. Responsibilities of the sonographer

- a. Verify that an order for a TEE is written either in the patient's chart or that the patient has a valid prescription prior to the test being performed. (May be performed by the nurse).
- b. Introduce yourself to the patient
- c. Verify the patient's identity via two identifiers
- d. Explain the procedure and answer any questions that the patient may have regarding the performance of the test using layman's terms.
- e. Wash hands prior to procedure
- f. Verify that the TEE probe has been properly cleaned prior to use on the new patient.
- g. Assist the physician with the echocardiograph machine during the procedure
- h. After the procedure is completed, the sonographer will disinfect the TEE probe following the guidelines in Rancho Los Amigos National Rehabilitation Center Policies and Procedures: Infection Control, Policy # 3.7

4. Physician Responsibilities:

- a. Evaluate patient and assess appropriateness of exam prior to starting.
- b. Obtain informed consent from patient/surrogate decision maker and answer questions as needed prior to procedure. Document informed consent in the chart prior to procedure.
- c. Note consent in the patient's medical records prior to the exam.
- d. After adequate sedation the physician will advance probe through the oral cavity into the esophagus and perform the imaging. Contrast material will be administered via IV if indicated. Additional sedation given as needed.
- e. Monitor patient tolerance of exam and initiate appropriate actions if needed.

5. Documenting TEE results

- a. The TEE images will be uploaded to the electronic medical record by the echocardiography technician. The cardiologist will enter the findings into the electronic medical record.

**REFERENCES:**

1. JOURNAL OF DIAGNOSTIC MEDICAL SONOGRAPHY July/August 2005 VOL. 21,  
NO. 4