GENERAL GUIDELINES FOR TRANSESOPHAGEAL PROBE INSERTION
Division of Cardiac Anesthesia, BIDMC

Patient Preparation:

1. Make sure there is no contraindication to TEE.
2. Make sure that the patient is anesthetized, intubated, and hemodynamically stable. Local anesthetic spray (e.g. lidocaine 10%) may be applied to the tongue and posterior pharynx to supplement a "light" general anesthetic.
3. Dentures and oral prostheses should be removed. Make note of any loose or previously damaged teeth.
4. A bite block (or rolled gauze) should be used to protect the probe if the patient has any teeth.

Probe Preparation:

1. The probe should be connected to the TEE machine and calibrated prior to insertion.
2. Both of the flexion wheels **MUST BE UNLOCKED**.
3. The probe must be lubricated generously with surgilube or another similar lubricant.

Insertion Technique:

1. The patient's head should be in the midline position and remain on the anesthesia pillow.
2. Replace and then remove an orogastric tube, after suctioning, to remove air and other gastric contents that can degrade image quality.
3. Initial placement attempt should be with the transducer (little gray or green circle) facing anteriorly.
4. The probe tip can be flexed slightly anteriorly (large wheel) but kept neutral with regards to lateral motion (small wheel).
5. Advance the probe into the mouth and posterior pharynx under direct vision making sure it stays **exactly in the midline**.
6. Pulling the mandible gently forward generally helps passage to the upper esophageal sphincter**.**
7. There is usually **slight** resistance as the probe passes posterior to the larynx.
8. Consider laryngoscopy and inserting the probe under direct vision if difficulty is encountered.
9. Observe the monitor after placing the probe and stop advancing when cardiac structures are visualized. Do not advance the probe past 35 cm if cardiac structures are not visualized.

Notes:

1. The most common reason for difficulty inserting the probe is failure to advance it in the midline position.
2. The technique is more similar to insertion of an NGT than an ETT, and thus the neck should be **flexed** not extended.
3. **DO NOT FORCE THE PROBE AT ANY TIME.** If any more than slight pressure is needed, ask for assistance.

CONTRAINDICATIONS TO TRANSESOPHAGEAL ECHOCARDIOGRAPHY

The distinction between absolute and relative contraindication to transesophageal echocardiography is somewhat blurred and represents a continuum of pathology and pathophysiology where the risks of the exam must be weighted against the benefits of the information gained by performing the exam. With that said, below are a list of relative and absolute contraindications to transesophageal echocardiography:

Relative Contraindications:

1. Esophageal varices/hematemesis
2. Active upper gastrointestinal bleeding
3. Barrett's esophagus
4. Zenker's diverticulum
5. Schatzke's ring
6. Prior mediastinal radiation
7. Severe cervical spine arthritis/instability
8. Dysphagia
9. Odynophagia
10. History of pharyngeal, esophageal or gastric surgery
11. Difficult endotracheal intubation (fear of dislodgement of ETT)

Absolute Contraindications:

1. Esophageal tumor
2. Esophageal stricture causing obstruction
3. Esophageal laceration or perforation
4. Recent pharyngeal, esophageal or gastric surgery

ABL 3/08