Transesophageal Echocardiography Elective
Goals and Objectives

Department of Anesthesiology and Perioperative Medicine
Medical College of Georgia

Course Description
The transesophageal echocardiography (TEE) elective is designed to provide experience for senior anesthesiology residents interested in learning the skill of TEE ultrasound over a 2-week elective. During this time, the resident will learn to perform and interpret the routine TEE examination. The resident will participate in all OR cases expected to involve TEE. Additionally, the resident will spend the remaining time during the work day interpreting interesting echocardiograms with the CT anesthesia faculty.

Goals and Objectives
Upon completion of the elective, the resident should be able to:

- Safely insert a TEE probe into an anesthetized patient
- Perform a basic TEE examination (evaluation of the left ventricle function, heart valves, aorta and regional wall motion abnormalities)
- Demonstrate the twenty standard SCA views used to evaluate the heart and great vessels during intraoperative TEE
- Measure normal cardiac dimensions, area and volume
- Measure global systolic and diastolic function and identify abnormalities
- Identify the different segments for regional wall motion analysis using the numeric scoring system
- Obtain TEE views and Doppler tracings relevant to function of the aortic and mitral valves
- Describe the principles of ultrasound imaging including 2D echo, spectral and color Doppler echo
- Differentiate between continuous and pulse wave Doppler ultrasound and understand their applications
- Understand and identify cardiac anatomy on TEE
- Discuss indications/contraindications, limitations and complications of TEE
- Understand and identify artifact that may interfere with TEE image interpretation
- Discuss the major echocardiographic manifestation of regurgitant and stenotic lesions of the aortic and mitral valves and their quantification and qualitative aspects
- Communicate effectively with the surgical and anesthesia teams, nurses, and other healthcare professionals to provide patient-focused care
- Function as a consultant regarding cardiovascular function to Anesthesiology and Cardiac Surgical colleagues during surgery
- Provide precise TEE interpretation to surgical colleagues to improve the intraoperative decision making and perioperative patient care

Reading Materials —

Evaluations — Every resident will be evaluated after the rotation.

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