

FIBEROPTIC ENDOSCOPY TRAINING PROGRAM

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Competency: Patient Care

In reviewing our clinical curriculum, it became apparent that there was a need for a more organized approach to the teaching of fiberoptic intubation skills, as well as a better assessment tool. In response to that need, the Fiberoptic Endoscopy Training Program was instituted in December 2003. Due to the fact that the program was instituted mid-educational year, there was an intensive focus on the training of CA-3 residents prior to their graduation. The ultimate goal is to have all three levels of residents participate, with an introductory phase for CA-1 residents and a more intensive phase for CA-2 residents. Third year residents will have the knowledge and skill set, and will therefore spend their final year perfecting their skills.

The goals of the program are as follows:

- **KNOWLEDGE:** Upon formal completion of the program, the resident will:
 - Have a thorough knowledge of airway anatomy
 - Be familiar with conditions associated with difficult intubation, in order to better predict the difficult airway
 - Have an understanding of the principles of fiberoptic light transmission and the structure of the fiberoptic intubating bronchoscope
 - Be able to discuss the complications of fiberoptic intubation
 - Know and be able to follow the ASA Difficult Airway algorithm
 - Master the proper care and maintenance of fiberoptic bronchoscopes
- **PATIENT CARE:** Upon formal completion of the program, the resident will:
 - Be familiar with the techniques of fiberoptic intubation
 - Have the skill and confidence to control and use a fiberoptic bronchoscope in managing a patient with a difficult airway
 - Be able to use the bronchoscope for procedures other than intubation i.e. placement of double lumen tubes, or visualization of the vocal cords and bronchial tree for diagnostic or therapeutic purposes
 - Will understand the importance of patient preparation, both psychologically and physically
- **COMMUNICATION AND INTERPERSONAL SKILLS:** Upon formal completion of this program, the resident will:
 - Understand the importance of good communication with the patient with an anticipated difficult airway
 - Be able to effectively explain the need for, and the process, of fiberoptic intubation
 - Maintain communication with the patient intraoperatively and postoperatively as well, with a postop visit to discuss the patient's experience

PROTOCOL

Patients of ASA status I-III with both normal as well as anticipated difficult or compromised airways, scheduled for elective surgery, are selected for training. Instructors are members of the faculty, all of whom have extensive experience with airway management and are comfortable with the intubation plan as presented by the resident. Patients with normal airways undergo the normally planned anesthetic induction with premedication, oxygen, and routine monitoring as dictated by the patient's condition. Following induction by the attending anesthesiologist, the resident attempts the fiberoptic intubation, with facilitation by the attending. The resident is given a time limit in which to accomplish the intubation; failing intubation the patient is oxygenated and a decision made whether to proceed with direct laryngoscopy or fiberoptic intubation. Patients with known or anticipated difficult airways may be managed the same (if easy mask ventilation is anticipated and not contraindicated) or awake and sedated if there are any concerns.

Upon completion of each successful intubation, residents enter the information in a Program log maintained in the Clinical Director's Office of the Operating Room, along with initialization by the supervising attending.

CRITERIA FOR PROFICIENCY

Each resident must perform fifty successful intubations, as well as complete a program evaluation and pass a post-training exam, prior to certification of proficiency in fiberoptic intubation.