LEARNING OBJECTIVES FOR AIRWAY MANAGEMENT ROTATION

I. PATIENT CARE

The residents develop a broad array of airway management skills, under the direct supervision of faculty, in a focused and organized manner, during this month long rotation. The skills are developed almost entirely during the care of patients, both elective and emergency. The skills include:

1. Awake intubation
2. Fiberoptic intubation; multiple techniques
3. Cannot ventilate, cannot intubate rescue options (includes LMA and Combitube in patients and transtrachea jet ventilation and cricothyrotomy in a mannequin)
4. Tracheobronchial tree anatomy for the purpose of managing airway foreign bodies, aspiration and lung separation.
5. Lung separation with bronchial blockers (Univent tube and independently passed bronchial blockers)
6. Ventilation and oxygenation management

II. MEDICAL KNOWLEDGE

Medical knowledge is gained during the rotation by

1. Thorough reading and analysis of the American Society of Anesthesiologists Difficult Airway Algorithm and application of skills (see above) within the context of the American Society of Anesthesiologists Difficult Airway Algorithm
2. Reading a syllabus given to reach resident that consists of classic / important articles, editorials, medical intelligence articles in the field of airway management.
3. One-on-one didactic teaching in the OR and by classroom lecture.

III. PRACTICE-BASED LEARNING AND IMPROVEMENT

As the attached chapter (Teaching Management of the Airway: The UCSD Airway Rotation, page 904) states “at the University of California, San Diego Medical Center ... we have developed a difficult airway rotation with the goal of creating non-urgent, non-stressful learning situations in which a multitude of
airway management techniques can be mastered in actual patients.” Thus, virtually all skill learning is “practice based”. All skills are practiced until satisfactory proficiency is attained as judges by both faculty and resident. For example, on-line all fiber optic techniques are visualized on a television screen and therefore “improvement” with repeated practice in patients is assessed by both teacher and student. Off-line the faculty always fills out a resident evaluation form and all residents fill out a faculty evaluation form. Perhaps the most gratifying form of evaluation is that UCSD anesthesia residency graduates are uniformly considered to be THE airway management experts wherever they go.

IV. INTERPERSONAL AND COMMUNICATION SKILLS

This month-long rotation involves an intense one-on-one experience of the resident with faculty. In order to make the rotation result in a high gain of skills and knowledge and yet totally avoid patient complications, the resident must interact effectively and positively with the patients, the operating room staff, nurses and the surgeon. The intense one-on-one relationship with the resident with the faculty, and the necessity to have no complications related to the airway rotation (“gentleness is mandatory” page 908 in attachment #1), guarantees the resident will have, or attain, highly satisfactory interpersonal and communication skills with all involved elements.

V. PROFESSIONALISM

It is widely acknowledged that anesthesiologists, as sub-specialists, are airway management experts. As detailed above, this expertise “professionalism” involves skills, knowledge and good interpersonal communication skills with the patients, nurses and surgeons. With an appropriate understanding of ethics, always putting the need of the patient first and a continuing commitment to excellence and education, our UCSD anesthesia residents finish the residency as very competent airway management professionals.

VI. SYSTEMS-BASED PRACTICE

The American Society of Anesthesiologists Difficult Airway Algorithm states that “a fundamental responsibility of the anesthesiologist is to continuously maintain adequate gas exchange.” This fundamental airway management responsibility must be met regardless of the “system” a patient may be in. Thus, the residents learn by acquiring skills and knowledge what “system” the patient requires in order to meet that patient’s needs and to deliver good patient care. Alternatively, in the area of airway management, the residents learn (by acquiring skills and knowledge) when a given system is incompatible with the patient’s needs and good patient care.