UCSD DEPARTMENT OF ANESTHESIOLOGY

LEARNING OBJECTIVES FOR POSTANESTHESIA CARE ROTATION, UCSD MEDICAL CENTER

I. PATIENT CARE

Residents will demonstrate competence in:

1. Placement/Removal of central and arterial line
2. Interpretation of Pulmonary Artery Catheter Readings/Tracings
3. Interpretation of Electrocardiograms
4. Interpretation of Arterial Blood Gases
5. Interpretation of Chest X-rays, including central line placement, identification of pneumothorax, and endotracheal tube placement
6. Be able to evaluate and implement priorities in patient care

II. MEDICAL KNOWLEDGE

Knowledge of Scientific Principles

1. Be able to discuss the following physiological changes associated with surgery
    a. CNS
    b. respiratory
    c. Cardiovascular
    d. Renal
    e. Gastrointestinal
    f. Thermoregulation
    g. Acid-Base
2. Be able to discuss pharmacodynamics, pharmacokinetics and metabolism of anesthetic drugs, including:
    a. Opiods and opiod antagonists
    b. Benzodiazepines and benzodiazepine antagonists
    c. NSAIDS

d. Muscle relaxants and reversal agents

e. Local anesthetics

f. Inhalational anesthetic agents

g. Anti-emetic drugs

h. Vasoactive agents - inotropes and vasodilators

Clinical Knowledge

Be able to discuss:

1. PACU admission criteria
2. PACU discharge criteria
    a. Discharge planning (to hospital floor and to home)
    b. Unexpected admission planning
3. Evaluation and management of issues and complications that may be encountered in the PACU
    a. Fluid replacement
        i. Crystalloid
        ii. Colloid
        iii. Blood products
        iv. Transfusion reactions
    b. Issues related to intracranial pressure
    c. Delayed awakening
    d. Postoperative agitation and delirium
    e. Postoperative pain - Epidural/caudal catheter management (one-sided, incomplete, patchy blocks)
    f. Prolonged neuromuscular weakness
    g. Respiratory problems
        i. Airway obstruction
        ii. Stridor/wheezing

iii. Hypoventilation

iv. Hypoxemia

v. Pulmonary aspiration

vi. Pulmonary edema

1. Post-obstructive

2. Fluid overload

3. Cardiogenic

h. Cardiovascular problems

i. Hypertension

ii. Hypotension

iii. Dysrhythmias

iv. Myocardial ischemia

i. Bleeding/coagulopathies

j. Postoperative nausea and emesis

k. Renal problems

i. Oliguria

ii. Polyuria

iii. Hematuria

iv. Urinary retention

v. Electrolyte and metabolic abnormalities

l. Hypothermia/hyperthermia

m. Malignant hyperthermia/Neuroleptic syndrome

n. Anaphylaxis

o. Ventilator management

i. Determine when postoperative ventilation is necessary

ii. Weaning of postoperative patients from ventilation support

III. PRACTICE-BASED LEARNING AND IMPROVEMENT

1. Be able to critically evaluate the postoperative management guidelines and supporting literature
2. Be able to seek out scientific evidence and apply it to decision making.
3. Become familiar with postoperative quality assurance indicators.
4. Compare evidence-based practice to commonly taught experience based decision making to develop a personal practice strategy.
5. Demonstrate understanding how to assess the impact of one's actions on outcomes

IV. INTERPERSONAL AND COMMUNICATION SKILLS

1. Demonstrate effective communication with patients and their families, nurses, nurse practitioners and physician colleagues.
2. Understand the role of teamwork and be able to effectively manage consulting services.
3. Learn and demonstrate techniques to decrease patient and patient family anxiety.
4. Demonstrate the ability to effectively communicate concerns with surgeons.
5. Learn effective communication techniques during period of severe stress, anxiety and complex patient care.

V. PROFESSIONALISM

1. Demonstrate compassionate and respectful behaviors when interacting with patients and their families.
2. Learn communication techniques with patients and families of different cultural backgrounds who possibly speak little English.
3. Demonstrate sensitivity to patients various age, gender, ethnic, and religious backgrounds.
4. Learn how to discuss and record cases with complications and/or poor outcomes.
5. Demonstrate a commitment to advocating patient care that is appropriate for their individual needs.
6. Adhere to institutional and departmental standards and policies.

7. Demonstrate ability to appropriately take on, share and delegate patient care responsibilities.

8. Demonstrate the ability to effectively balance one's own personal affairs with clinical and educational duties as outlined in this document.

VI. SYSTEMS-BASED PRACTICE

1. Be able to assist patients in dealing with systemic and bureaucratic complexities

2. Learn how to consult or work as a team member with health care managers or health care professionals to assess, coordinate, and improve health care.

3. Be able to discuss how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.

4. Understand how their patient care and other professional practices affect other health care professionals, other medical services, and how these elements of the system affect anesthesiology/pain/critical care practices.

5. Learn how to affect improved operating room efficiency safely.

6. Appreciate the complex interactions that go on between primary care teams, consulting services, surgeons and anesthesiologist in the overall hospital management of patients.