DESCRIPTION

A) General Description: Clinical duties in the OR

B) Learning Objectives

MEDICAL EXPERT

1. Demonstrate an understanding of the anesthetic considerations for a variety of medical conditions and perform the appropriate/necessary preoperative assessment/preparation of the patient.
   - obtain and record pertinent medical history and perform a focused physical examination including assessment of the airway, the respiratory and cardiovascular system, and other systems as indicated by the clinical situation.
   - interpret basic laboratory data and investigations relevant to the perioperative assessment
   - develop and problem list and assign appropriate physical status
   - recommend appropriate pre-medication (eg. aspiration prophylaxis) and recognize which medications to hold preoperatively (eg. anticoagulants)
   - State recommended preoperative fasting guidelines, list risk factors for perioperative aspiration and describe risk reduction strategies

2. Acquire the knowledge necessary to conduct appropriate fluid and blood component therapy
   - recognize and describe the physiologic and pathologic routes of fluid losses and be able to estimate these losses
   - assess a patient’s volume status using history, physical exam and lab investigations
   - demonstrate an understanding of the composition of commonly available intravenous fluids by selecting appropriate perioperative fluid and electrolyte replacement. While taking into account the patient’s deficits, maintenance requirements and ongoing losses
   - insert a peripheral intravenous catheter
   - state the indications and complications of the various blood products and describe the factors influencing decision making/thresholds to administer blood product therapy

3. Recognize and describe the main drug classes frequently used in the perioperative period
   - describe the main therapeutic effects, side effects and contraindications of the following classes of medications:
     i. Benzodiazapines - midazolam, lorazepam
     ii. Anticholinesterase and anticholinergics - neostigmine, glycopyrrolate, atropine sulfate
iii. Opioids agonists & antagonists - fentanyl, sufentanil, remifentanil, alfentanil, morphine sulphate, meperidine, naloxone
iv. Induction agents - propofol, sodium thiopental, ketamine, etomidate
v. Inhalational agents - desflurane, sevoflurane, isoflurane, nitrous oxide
vi. Anxiolytics - midazolam
vii. Local anesthetics (lidocaine, bupivacaine - including maximum recommended dosage)
viii. Muscle relaxants - succinylcholine, rocuronium, pancuronium bromide, atracurium
ix. NSAIDS - ibuprofen, naproxen, celecoxib
x. Vasoactive medications - ephedrine sulfate, epinephrine, phenylephrine
xi. Antiemetics - dimenhydrinate, ondansetron, prochlorperazine
- recognize the signs and symptoms of local anesthetic toxicity and outline initial management

4. Review and describe the principles of acute pain management
- identify and describe a variety of modalities commonly used for pain control
- explain the concept of multimodal analgesia

5. Demonstrate the ability to manage the airway and ventilation of an unconscious patient
- label the basic structures of the oropharyngeal and laryngo-tracheal anatomy
- state the indications and complications of airway management by laryngeal masks, face mask and intubation
- identify the appropriate sizes of laryngeal masks, face masks, oral and nasal airways, laryngoscope blades and endotracheal tubes
- independently demonstrate bag-mask ventilation of an unconscious patient
- recognize upper airway obstruction and independently demonstrate appropriate use of face mask, oral and nasal airways, head positioning, jaw thrust and chin lift maneuvers
- successfully prepare appropriate equipment for intubation
- position and intubate a patient with minimal supervisory intervention
- correctly identify (within 15 seconds) those patients in whom endotracheal intubation was not successful
- recognize need for intubation/controlled ventilation using a combination of clinical circumstances, physical signs, and lab results

6. Demonstrate the ability to manage the airway and ventilation of an unconscious patient
- label the basic structures of the oropharyngeal and laryngo-tracheal anatomy
- state the indications and complications of airway management by laryngeal masks, face mask and intubation
- identify the appropriate sizes of laryngeal masks, face masks, oral and nasal airways, laryngoscope blades and endotracheal tubes
- independently demonstrate bag-mask ventilation of an unconscious patient
- recognize upper airway obstruction and independently demonstrate appropriate use of face mask, oral and nasal airways, head positioning, jaw thrust and chin lift maneuvers
- successfully prepare appropriate equipment for intubation
- position and intubate a patient with minimal supervisory intervention
- correctly identify (within 15 seconds) those patients in whom endotracheal intubation was not successful
COMMUNICATOR
1. Communicate routine information in straightforward circumstances with indirect supervision
2. Communicate effectively with respect for the skills and contributions of other members of the healthcare team.
3. Communicate patient status to supervisors and other providers effectively, including hand offs and transitions in care
4. Present preoperative assessment in a clear, concise and complete format in a timely manner

COLLABORATOR
1. Establish and maintain effective working relationships with colleagues and health care professionals.
2. Consult effectively with physicians and other health care professionals
3. Participate effectively on health care team
4. Understand the high level of collaboration (anesthesia, surgery, nursing, pharmacy, anesthesia assistants, and respiratory therapists) required for the effective management of the patient in the perioperative period

HEALTH ADVOCATE
1. Understand the risk factors that lead to increased perioperative risk and how anesthesiologists can assist in modifying these risks in the perioperative period.

PROFESSIONAL
1. Demonstrate a commitment to patient care that emphasizes the best interests of the patient.
2. Recognize a patient’s right to confidentiality, privacy, and autonomy, and treats patients and families with compassion and respect.
3. Seek assistance appropriate to the needs of the clinical situation while taking into consideration one’s own experience and knowledge.
4. Address ethical issues relevant to entry level rotations with direct supervision
5. Accept constructive feedback, but occasionally demonstrate resistance to feedback

C) Night and Weekend Call:
   Yes (X) Optional
   No

D) Evaluation Procedure:
   Written Exam ( )
   Oral Exam ( )
   Summative Clinical Elective Assessment (X)

NON-LOTTERY:
Anesthesia rotations – note: Registration is NOT through the 4th Year Electives Lottery. Requests are only processed via the Windsor Non-Lottery 4th Year Elective Request form located on the Medicine 5401 – Year 4 Clinical Sciences Electives web page

REGISTRATION:
https://www.schulich.uwo.ca/medicine/undergraduate/academic_resources/year_4/windsor_nonlottery_4th_year_elective.html