Objectives of Training in Anesthesiology

DEFINITION

Anesthesiology is a medical specialty which includes patient assessment and provision of life support, amnesia, and analgesia for both surgical procedures and childbirth; assessment and management of critically ill patients; and the assessment and management of patients with acute and chronic pain.

GENERAL OBJECTIVES

Upon completion of training, a resident is expected to be a competent specialist anesthesiologist, capable of assuming a consultant’s role in the specialty. The resident must acquire a working knowledge of the theoretical basis of the specialty, including its foundations in the basic medical sciences and research. Training must also encompass the provision of anesthesia services for all age groups in varied clinical situations. Performance must, therefore, reflect the anesthesiologist's knowledge of surgery, intensive care and resuscitation, the management of acute and chronic pain and includes assessment and provision of appropriate care of the mother and neonate in obstetrics. The resident must demonstrate a thorough knowledge of how perioperative management should be modified in the presence of concurrent medical problems.

The resident must also demonstrate the knowledge, skills and attitudes relating to gender, culture and ethnicity pertinent to Anesthesiology. In addition, all residents must demonstrate an ability to incorporate gender, cultural and ethnic perspectives in research methodology, data presentation and analysis.

SPECIFIC OBJECTIVES

At the completion of training, the resident will have acquired the following competencies and will function effectively as a:

Medical Expert/Clinical Decision-maker

General Requirements:
• Demonstrate diagnostic and therapeutic skills for ethical and effective patient care.
• Access and apply relevant information to clinical practice.
• Demonstrate effective consultation services with respect to patient care, education and legal opinions.

**Specific Requirements:**
• Demonstrate knowledge of the basic sciences as applicable to anesthesiology, including anatomy, physiology, pharmacology, biochemistry and physics.
• Demonstrate knowledge of general internal medicine with particular reference to the cardiovascular, respiratory, renal, hepatic, endocrine, hematologic and neurologic systems.
• Demonstrate knowledge of age related variables in medicine as they apply to neonatal, pediatric, adult and geriatric patient care.
• Demonstrate knowledge of the principles and practice of anesthesiology as they apply to patient support during surgery or obstetrics.
• Demonstrate clinical skills necessary for basic resuscitation and life support as practiced in critical care facilities.
• Demonstrate knowledge of the principles of management of patients with acute and chronic pain.
• Demonstrate knowledge of the role of the consultant anesthesiologist in the provision of safe anesthetic services within both community and teaching facilities.
• Demonstrate clinical skills necessary for the independent practice of anesthesiology, including preoperative assessment, intraoperative support and postoperative management of patients of any physical status, all ages and for all commonly performed surgical and obstetrical procedures.
• Demonstrate clinical skills necessary to general internal medicine and intensive care including the ability to investigate, diagnose, and manage appropriately factors that influence a patient’s medical and surgical care.
• Recognize that prior to provision of anesthetic care specific medical intervention and modification of risk factors may be required.
• Demonstrate competence in all technical procedures commonly employed in anesthetic practice, including airway management, cardiovascular resuscitation, patient monitoring and life support, general, and regional anesthetic and analgesic techniques and postoperative care.
• Demonstrate knowledge of basic legal and bioethical issues encountered in anesthetic practice including informed consent.

**Communicator**

**General Requirements:**
• Establish a professional relationship with patients and families.
• Obtain and collate relevant history from patients, and families.
• Listen effectively.
• Discuss appropriate information with patients and families and other members of the health care team.

**Specific Requirements:**
• Demonstrate consideration and compassion in communicating with patients and families.
• Provide accurate information appropriate to the clinical situation.
• Communicate effectively with medical colleagues, nurses, and paramedical personnel in inpatient, outpatient, and operating room environments.
• Demonstrate appropriate oral and written communication skills.
• Ensure adequate information has been provided to the patient prior to undertaking invasive procedures.

**Collaborator**

**General Requirements:**
• Consult effectively with other physicians and health care professionals.
• Contribute effectively to other interdisciplinary team activities.

**Specific Requirements:**
• Demonstrate ability to function in the clinical environment using the full abilities of all team members.

**Manager**

**General Requirements:**
• Utilize personal resources effectively in order to balance patient care, continuing education, and personal activities.
• Allocate finite health care resources wisely.
• Work effectively and efficiently in a health care organization.
• Utilize information technology to optimize patient care, and lifelong learning.

**Specific Requirements:**
• Demonstrate knowledge of the management of operating rooms.
• Demonstrate knowledge of the contributors to anesthetic expenditures.
• Demonstrate knowledge of the guidelines concerning anesthetic practice and equipment in Canada.
• Record appropriate information for anesthetics and consultations provided.
• Demonstrate principles of quality assurance, and be able to conduct morbidity and mortality reviews.

**Health Advocate**

**General Requirements:**
• Identify the important determinants of health affecting patients.
• Contribute effectively to improved health of patients and communities.
• Recognize and respond to those issues where advocacy is appropriate.

**Specific Requirements:**
• Provide direction to hospital administrators regarding compliance with national practice guidelines and equipment standards for anesthesiology.
• Recognize the opportunities for anesthesiologists to advocate for resources for chronic pain management, emerging medical technologies and new health care practices in general.
Scholar

General Requirements:
- Develop, implement, and monitor a personal continuing education strategy.
- Critically appraise sources of medical information.
- Facilitate learning of patients, students, and other health professionals.
- Contribute to the development of new knowledge.

Specific Requirements:
- Develop criteria for evaluating the anesthetic literature.
- Critically assess the literature using these criteria.
- Describe the principles of good research.
- Using these principles, judge whether a research project is properly designed.

Professional

General Requirements:
- Deliver highest quality care with integrity, honesty and compassion.
- Exhibit appropriate personal and interpersonal professional behaviours.
- Practice medicine ethically consistent with the obligations of a physician.

Specific Requirements:
- Periodically review his/her own personal and professional performance against national standards.
- Include the patient in discussions concerning appropriate diagnostic and management procedures.
- Respect the opinions of fellow consultants and referring physicians in the management of patient problems and be willing to provide means whereby differences of opinion can be discussed and resolved.
- Show recognition of limits of personal skill and knowledge by appropriately consulting other physicians and paramedical personnel when caring for the patient.
- Establish a pattern of continuing development of personal clinical skills and knowledge through medical education.

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