OBSTETRICAL ANESTHESIA

THE ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF CANADA
Objectives of Training and Specialty Training Requirements in Anesthesia

Specific Objectives in CanMEDS Format

OVERALL GOALS

Residents in the Western University Anesthesia Training Program will be involved in the care of Obstetrical patients throughout their residency. Residents are expected to be familiar with the objectives outlined in this document and are invited to discuss any questions or concerns with their supervisors.

By completion of residency training the resident is expected to:

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

ROTATION OBJECTIVES

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

Medical Expert/Clinical Decision Maker

Diagnostic and Therapeutic Skills

PGY-1 to 3

A. Physiology/Pathophysiology of Pregnancy

The resident will:

- Be able to describe the physiologic changes of normal pregnancy and their relevance to anesthetic management of the pregnant patient.
- Know relevant fetal physiology, potential fetal effects of anesthesia for labour and delivery, and basic principles of FHR monitoring.
- Be able to describe normal uteroplacental blood flow and placental drug transfer mechanisms.
- Understand pain pathways involved in labour and delivery.
- Be able to describe the pathophysiologic changes accompanying common medical complications of pregnancy including, but not limited to:
  - Diabetes
- Infection (maternal, fetal)
- Hypertension
- Asthma
- Coagulopathy

- Be able to describe specific obstetric complications and their anesthetic implications:
  - Antenatal and postpartum hemorrhage
  - Malpresentation
  - Placental abruption
  - Placenta previa, placenta accrete
  - Ectopic pregnancy
  - Preterm labour
  - Uterine atony
  - Uterine laceration/perforation
  - Inverted uterus
  - Multiple gestation
  - Amniotic fluid embolism

B. Anesthesia and Analgesia for the Pregnant Patient

The resident will:
- Be familiar with the indications, contraindications, and management of anesthetic techniques for regional and general anesthesia in the parturient.
  - Anesthesia during pregnancy for non-obstetrical surgery
  - Options for analgesia during labour and delivery (pharmacologic and non-pharmacologic)
  - Anesthesia for “double set up” and caesarean section (elective/urgent/emergent)
  - Anesthesia for management of postpartum hemorrhage

- Become competent in the provision of epidural analgesia for labour and delivery, and in the provision of either regional or general anesthesia for c-section.
- Be able to manage complications of labour analgesia (hypotension, toxic reactions to local anesthetics, dural puncture / PDPH, inadequate block).

PGY-4 to 5

A. Physiology/Pathophysiology of Pregnancy

The resident will:
- Further enhance his/her knowledge of the topics listed in the PGY-1 to 3 objectives.
Be able to describe the anesthetic considerations and management of patients with uncommon medical and obstetrical conditions including:

- Valvular heart disease
- Congenital heart disease (corrected/uncorrected)
- Cardiomyopathy
- Neurologic disease and pregnancy
- Endocrine disease and pregnancy
- Musculoskeletal disease and pregnancy
- Substance abuse
- Hematologic disease and pregnancy
- Hepatorenal disease and pregnancy
- Morbid obesity

B. Anesthesia and Analgesia for the Pregnant Patient

The resident will:

- Gain further experience/development of expertise in techniques of regional and general anesthesia for the pregnant patient.
  - Epidural analgesia and anesthesia
  - Combined spinal – epidural
  - Spinal anesthesia
  - General anesthesia, including management of the difficult airway
  - Epidural blood patch

Communicator

The resident will:

- Demonstrate the ability to communicate with patients and their families, and other members of the health care team regarding anesthetic care and management plans.
- The resident will encourage the participation of patients and their families while obtaining informed consent for procedures.

Collaborator

The resident will demonstrate the ability to:

- Function as a member of a team in caring for the parturient during the antenatal, intrapartum and postpartum periods
- Understand the indications for appropriate consultation with other physicians or allied health care professionals.
Manager

The resident will demonstrate the ability to:
  - Utilize time and resources effectively in balancing patient care and associated activities.
  - Understand the guidelines for establishment and administration of an obstetrical anesthesia service in a community hospital utilize information technology to optimize patient care and continuing education.

Health Advocate

The resident will:
  - Follow the practice guidelines of the Canadian Society of Anesthesiologists.
  - Recognize issues where it is appropriate to act as a patient advocate, and perform this role effectively.

Scholar

The resident will:
  - Be able to critically assess the obstetrical anesthesia literature and other sources of medical information.
  - Attend rounds and teaching seminars as scheduled.
  - Contribute to the education of other individuals in the obstetrics unit (medical students/patients/other healthcare providers).

Professional

The resident will:
  - Practice in an ethically responsible and professionally appropriate manner displaying integrity, honesty, and compassion.

Reviewed: 2012, Dr. Granton