



Anesthesia Fellowship & Residency Training Program, KAMC-R

# Obstetrical Anesthesia Fellowship Program

Structure, Rules, Regulations and Procedures

2015

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The Department of Anesthesia in King Abdulaziz Medical City – Riyadh (KAMC-R), Ministry of National Guard Health Affairs is pleased to announce the availability of a two-year clinical fellowship in Obstetrical Anesthesia. This Obstetrical Anesthesia fellowship program places emphasis on clinical practice, through the acquisition of knowledge and clinical exposure, educational/teaching skills, leadership and managerial skills.

The patient population consists of women eligible to receive medical care in Ministry of National Guard Health Affairs hospitals across the Kingdom. The tertiary care facilities here provide care to both low and high risk obstetrical patients. Fellows enrolled in this program will be exposed to a wide variety of clinical experiences including: a cesarean section rate of (21%) (includes both elective and emergent), an active acute pain service, significant exposure to regional analgesia and anesthesia, advance consultation for high risk parturient and assisted medical management of the high risk patient in hospital.

Fellows are actively encouraged to participate in various research endeavors including: a course study in research statistics, departmental research symposiums, and research in progress discussion groups. It is generally recognized that there are time limitations in completing at least two research projects (one of them should be RCT under supervision of the research committee of the hospital) during a two-year fellowship program, but does not exclude the potential for active research and publication for interested individuals.

Upon successful completion of the program, fellows will have acquired the knowledge and skills essential to the safe practice of Obstetric Anesthesia. They will also be in a position to provide vision and leadership in the field.

The program is designed to fulfill criteria of the subspecialty issued by the Saudi Commission for Health Specialties (SCFHS). Education standards will be applied in accordance to North American guidelines. The Scientific Committee and the program director must abide by the approved contents of the fellowship training program by the SCFHS.

In the end, this document defines educational goals, objectives and curriculum for the Obstetric Anesthesia Fellowship Program in King Abdulaziz Medical City – Riyadh, Ministry of National Guard Health Affairs.

Sincerely,

Nasser Tawfeeq, MBBS, FRCPC

Division Head, obstetric Anesthesia

#### 1. Mission Statement

The mission of the Division of Obstetric Anesthesia in the Department of Anesthesia, KAMC-R is to provide the highest quality anesthesia care to the patients of this institution and to advance the science of the specialty through research and teaching. We are committed to providing our services to the patients of Ministry of National Guard Health Affairs a comprehensive and compassionate manner that maintains human dignity and is in conformance with the mission of the Organization.

#### 2. Vision

An academic medical center must provide excellent care that is compassionate and competent, focusing on the needs of the community as well as striving to continuously improve its services

# OBSTETRICAL ANESTHESIA FELLOWSHIP GOALS AND OBJECTIVES

The Obstetrical Anesthesia Fellowship will focus and direct various educational and clinical venues within the curriculum in order to successfully meet the following goals and objectives of the program.

# 1. General Goals, Objectives and Attitudes for Development of the Complete Fellow

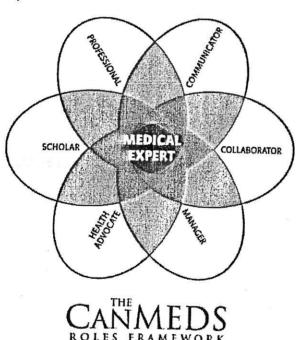
As in all areas of anesthesia, obstetrical anesthesia provides opportunity to continue to develop and refine skills essential for the safe and effective practice of anesthesia. Along with the development of very specific skills and knowledge in the area of obstetrical anesthesia, the fellow should continue to practice and incorporate the goals and objectives listed below into their educational experience in obstetrical anesthesia. The Fellow should:

- 1.1. Demonstrate through actions and decisions that he/she is able to function as a medical expert and decision maker within the realm of anesthesia, a role that incorporates all the other skills mentioned in this section. Accumulation of data (history and physical exam, lab data, etc.) will be used to formulate a safe and appropriate anesthetic plan. The Fellow should also recognize their limitations and effectively consult other specialties as needed (eg. cardiology, hematology). The fellow should be able to demonstrate insight into their limitations and therefore define areas that need improvement.
- 1.2. Strive towards impeccable communication skills with patients, families and other members of the multidisciplinary team. The ability to discuss the risks and benefits of all the anesthetic options available for analgesia and surgical care of the pregnant patient is absolutely necessary for the ethical practice if anesthesia. Clear and accurate records must be maintained for post-operative care, future anesthetic planning, research, and medico-legal purposes. During the transfer of care, being an effective communicator is necessary in order to pass on essential information to colleagues and other members of the multidisciplinary team for continuity of care and safe delivery of anesthetic care to the parturient, example the ongoing medical management of severe preeclampsia.
- 1.3. Become an effective collaborator within the framework of the team approach to health care delivery. There are many opportunities to work together with many different professionals who provide special skills and who also share the main goal of providing the best possible care to the patient and the newborn. The Fellow should be able to demonstrate that he/she can contribute effectively to the interdisciplinary team activities through effective consultation, expressing meaningful opinions, research and teaching as appropriate. Seeking out information related to clinical practices will allow the fellow to evaluate their own approach. Thus meaningful changes can be incorporated and reevaluated to achieve the best standards of practice.
- 1.4. Understand the role of manager as it applies to the anesthesiologist practicing obstetrical anesthesia. In our health care system today there are limited resources. The fellow should become familiar with the impact of obstetrical care, both good and bad on the consumption of these resources. The time from delivery to discharge has dramatically shortened compared to past years. The challenge is to provide optimal

obstetrical, anesthetic and neonatal care in this shortened time frame without a compromise to patient safety. Optimal analgesia has a major impact on the process and makes the goal more easily attainable. A system should be in place in order to continue to monitor and assess patients with residual or ongoing issues who have been discharged from the hospital.

- 1.5. Become aware of the role of health advocate for the obstetrical population. No matter what pressures exist, the role of the anesthesiologist is to advocate for safe anesthetic care of the parturient and the newborn. Careful self-assessment and literature review should be used to analyze whether various anesthetic techniques offer benefits to patient care. This information should be used to advocate for patients in order to facilitate current best based clinical practice management and meet the requirements for additional or new resources.
- 1.6. Be motivated for self-directed learning by utilizing various resources bases to enhance or change the practice of obstetrical anesthesia; journals, textbooks, databases and related conferences and meetings.
- 1.7. Assume the role of an integrated professional team member. At all times he/she will carry out the practice of obstetrical anesthesia with integrity, honesty and compassion. The standards at all times should be to adhere to legal and ethical roles of practice.

In summary, these seven standard roles should serve as the framework for development of the fellow and future staff person:



# 2. Knowledge Objectives

At the conclusion of the one year rotation in Obstetrical Anesthesia, the fellow will:

2.1. Have a thorough knowledge of the physiologic changes in pregnancy.

- 2.2. Understand maternal uptake/distribution, placental transfer, and perinatal effects of volatile anesthetics, barbiturates, ketamine, narcotics, sedatives, tranquilizers, neuromuscular blocking agents, local anesthetics, antihypertensive agents, anticoagulants, Tocolytic, as well as glucose/hypoglycemic agents.
- 2.3. Understand uterine blood flow it's changes in pregnancy, how regional and general anesthetics effect it, and the effects of vasopressors/antihypertensive agents on it.
  - 2.4. Understand the physiology of labor, it's stages, how anesthesia effects labor, and how agents used in labor and delivery (like tocolytic's, ergot alkaloids, pitocin, prostaglandin's, etc.) can effect maternal physiology and anesthetic management.
  - 2.5. Understand and be able to discuss the advantages, disadvantages, and risks of sedation, inhalation, epidural, spinal, and pudendial nerve anesthesia for labor.
  - 2.6. Understand and be able to discuss the advantages, disadvantages, and risks of local, regional and general anesthesia for the patient undergoing cesarean section.
  - 2.7. Understand and manage induction, maintenance, and emergence from general anesthesia, the effects of volatile anesthetics on the uterus and fetus, the pros/cons of Nitrous Oxide, and the management of complications such as failed intubation, aspiration, hypotension, hypertension, etc.
  - 2.8. Understand and be able to discuss the advantages, disadvantages, and risks of anesthesia for the patient undergoing non-obstetric surgery during pregnancy.
  - 2.9. Understand how agents/ procedures in the induction/augmentation of labor can affect maternal anesthetic care such as amniotomy and the use of oxytocin.
  - 2.10. Understand the pharmacokinetics / pharmacodynamics of local anesthetics as well as complications/toxicity in the parturient and neonate.
  - 2.11. Understand the options for post-partum anesthesia care the advantages, disadvantages and risks.
  - 2.12. Understand and be able to describe the anatomic features and appropriate landmarks necessary to administer a regional anesthetic block including spinal dermatomes and pain pathways.
  - 2.13. To identify and assess the relative and absolute contraindications to regional anesthesia related to coagulopathy, neurologic disease, hypovolemia, drug allergy, fever/sepsis, backache, scoliosis, etc.
  - 2.14. Understand, recognize, and manage patients with medical conditions in pregnancy such as:
    - 2.14.1. Pregnancy induced hypertension
    - 2.14.2. Cardiac disease (congenital/ischemic/valvular/cardiomyopathy)
    - 2.14.3. Respiratory disease (restrictive/obstructive)
    - 2.14.4. Bleeding disorders in pregnancy (placenta previa, abruption, accreta, etc.)

- 2.14.5. Diabetes
- 2.14.6. Morbid obesity
- 2.14.7. Difficult airways
- 2.14.8. The causes of cardio-respiratory arrest
- 2.14.9. Misc. disorders (thyroid, NM disorders, MH, coagulopathies)
- 2.14.10. The patient with PDPH
- 2.15. Describe/manage complications of regional anesthesia in pregnancy hemodynamic, backache, bladder dysfunction, neurologic sequela, infection, headache, etc.
- 2.16. Understand and discuss obstetric and neonatal indications for cesarean section both elective and emergent and be able to discuss the risk/benefits of the various options for anesthetic management.
- 2.17. To discuss the obstetrical considerations/management of labor complications such as breech delivery, cord prolapse, transverse lie, multiple Gestation, brow presentation, premature rupture of membranes, and premature delivery.
- 2.18. Understand the management of maternal hemorrhage and the risks associated with such conditions as: previa, abruption, accreta, uterine rupture, uterine atony, retained placenta, uterine inversion, DIC.
- 2.19. Understand the basic anatomy and physiology of the feto-placental unit, antepartum fetal monitoring and assessment including non stress testing, oxytocin stress testing, biophysical profile, fetal lung maturity testing, fetal heart rate monitoring, and fetal pH monitoring.
- 2.20. Understand and to discuss peripartum fetal asphyxia diagnosis/management of neonatal disorders such as meconium aspiration, diaphragmatic hernia, T-E fistula, sepsis, RDS of the newborn.

### 3. Skills Objectives

- 3.1. To be proficient in the placement and management of regional anesthesia (both spinal and epidural anesthetics) in all clinical setting for labor, cesarean delivery, D&C, postpartum tubal ligation, cerclage, etc. The goal is to do a minimum of 50 regional anesthetics per month.
- 3.2. To be able to select appropriate monitoring for the various clinical settings that occurs in the parturient.
- 3.3. To be able to pre-operatively evaluate and design a safe anesthetic plan for the anesthetic management of:
  - 3.3.1. The healthy parturient for vaginal delivery with or w/o the use of forceps.
  - 3.3.2. The healthy parturient presenting for elective cesarean section
  - 3.3.3. The healthy parturient presenting for emergency cesarean section.

- 3.3.4. The parturient with Preeclampsia/Eclampsia for either vaginal/cesarean section
- 3.3.5. The parturient with antepartum/intrapartum/postpartum hemorrhage
- 3.4. To be familiar with the diagnosis and management of the fetal/neonatal distress.
- obstetric care team, to lead in the pre-anesthetic evaluation, labor, intra-operative and post-operative care as well as maternal/fetal resuscitation.
  - 3.6. Learn to function as a consultant to patients, families, and colleagues in anesthesia, obstetrics and other specialties.

#### 4. Introduction

The educational strategy is to encourage the fellows to compile their own knowledge base and then to seek opportunities to discuss and demonstrate their knowledge inkeeping with current educational practices.

# 5. Training Program Structure

- 5.1 Duration of the program will be twenty-four months.
- 5.2 The capacity of training program is one candidates per year, to total a maximum of two fellows over each two-year period. The total number of fellows will be reviewed annually and adjusted according to the patients volume.
- 5.3 Program Structure:

#		Duration (in months)	General Principles & Remarks
1	Core Obstetr	09	The fellow will be allocated to Labor & Delivery rooms for elective, emergency, C-sections and epidural services
2	Acute Pai Services fo Obstetrics & Gynecology		The fellow will devote his/her time for acute pain management for patients who needs multimodal analgesia after surgical intervention; with emphasis on the management of post-puncture headache related to C-section
3	Gynecology Anesthesia	02	The fellow will be allocated to Gynecology rooms and Gynecologic Oncology rooms.
4	Neonatal Intensive Care	01	The Fellow will be allocated to neonatal resuscitation and mandatory NRP Certificate.
5	Ultrasound High Risk Clinic	01	The fellow will be trained on ultrasound acquiring and interpretation.
6	Pre-anesthesia Clinic	01	The fellow will be exposed to outpatient pre-operative medicine.
7	High Risk Obstetric Anesthesia	01	The fellow will be allocated to follow up high-risk cases referred form High Risk obstetric Unit' whether inpatient or outpatient.
8	Hematology	01	The fellow will be allocated to Transfusion Medicine.
9	Cardiology	01	The fellow will be allocated to the consultation service/CCU in Cardiology.
10	Elective	01	The fellow will be allowed the opportunity to develop extra skills and knowledge in any area of interest
11	Research		in prospective study
12	Holiday	02	The fellow will be allowed a total of 30 days annual leave; submitted in accord with Medical Education rules and regulations.

# 1. Core Obstetric Anesthesia

Objective	<b>:</b>	To develop competencies in providing anesthetic care for obstetrical patients in Labor & Delivery rooms; whether for elective or emergency, C-sections, as well as to develop competency in providing labor epidurals
Duration	:	09 months
Outline of Training	:	To acquire knowledge and skills necessary for performing spinal anesthesia, epidural anesthesia as well as massive transfusion, as well as to handle any issues that may arise during C-sections

# 2. Acute Pain Services for Obstetrics & Gynecology

Objective	:	To develop competences in managing acute pain for patients who needs multimodal analgesia after surgical intervention; with emphasis on the management of post-puncture headache related to C-section
Duration	:	01 month
Outline of Training		To acquire knowledge and skills in managing patients require multimodal analgesia such as patients on controlled analgesia pumps, neuraxial analgesia infusions or regional blocks infusions. Moreover to treat medical patients who needs complex analgesia therapy for their illness such as sickle cell disease and oncology patients. Also to handle any complication or sequelae from narcotics overdose or post-regional block neuropraxia or damage.

# 3. Gynecology Anesthesia

Objective	:	To develop competences in managing anesthesia for Gynecology and Gynecologic Oncology patients
Duration	:	02 months
Outline of Training	:	To acquire knowledge and skills necessary to perform adequate pre-operative assessment for high-risk Gynecologic Oncology patient, and to achieve better utilization of Regional anesthesia during Gyne anesthesia

### 4. Neonatal Intensive Care

Objective	:	To develop competences in the management of premature babies and full term with severe neonatal disease.
Duration		01 month

		To acquire knowledge in managing ventilated and critically ill premature patients with common age related disease such as
Outline of Training	:	acute respiratory disease syndrome, persistent fetal
		circulation, congenital diaphragmatic hernia,
		Tracheoesophageal fistula, and Necrotizing enterocolitis

# 5. Ultrasound High Risk Clinic

Objective	:	To develop competency in utilizing ultrasound, and to familiarize fellows with ultrasound-graphic terms
Duration		01 month
Outline of Training	:	To acquire knowledge and skills necessary to utilize ultrasound for the purpose of understanding physics and feto-maternal medicine

# 6. Pre-anesthesia Clinic

Objective	:	To develop competences in the management of patients booked for surgical operation as day surgery or same day admission
Duration	:	01 month
Outline of Training	•	To acquire knowledge and decision making to optimize patients booked for surgeries as day surgery and same-day admission, to be able to consult other specialties and to implement guidelines in ambulatory care, moreover be able to council patients and their families and to arrange and organize the surgery to be a smooth positive experience.

# 7. High Risk Obstetric Anesthesia

Objective	:	To develop competency in high risk cardiac and hematological diseases for patients booked for OR
Duration	:	01 month
Outline of Training	:	Address consultations under the supervision of high risk obstetric services

# 8. Hematology

Objective	:	To develop an approach to and further knowledge of the clinical problems in peri-operative care
Duration	:	(1) month
Outline of Training	:	Address consultations under the supervision of Hematology services

# 9. Cardiology

Objective	:	To develop an approach to and further knowledge of the clinical problems in peri-operative care
Duration	:	(1) month
Outline of Training	:	Address consultations under the supervision of Cardiology services

# 10. Elective Rotation

Objective	:	To develop extra skills and knowledge in any area of special interest for each fellow.
Duration	:	02 months
Outline of Training	•	Fellows can spend this period in any clinical rotation of their interest or in a research project that adds to their understanding of obstetric Anesthesia and enhance their critical thinking to promote for an advance evidence based practice.

### CONTENTS OF THE PROGRAMME

#### 1. Call Schedule

The fellow will take a total of three nights of obstetrical anesthesia call per month in the first half of the fellowship, then one night call in the second half of the fellowship program. In addition, the fellow will do one surgical call and one backup call per month during the fellowship program.

The fellow will also be given the opportunity to come in for rare cases on other days/evenings, at his/her discretion.

### 2. Continuous Professional Development

Fellows will be expected to:

- 2.1. Attend all the Educational and performance Improvement rounds of the Department of Anesthesiology and selected rounds of other disciplines.
- 2.2. Prepare topics for presentation at regular intervals and demonstrate skill in researching, summarizing, interpreting and presenting related topics derived from different of sources such as peer-reviewed journals.
- 2.3. Attend at least one international conference or refresher Anesthesiology.

### 3. Patient Care Responsibilities & Supervision

- 3.1. Fellows will be responsible for the preoperative assessment, anesthetic care and post-operative follow-up of assigned cases under the direct supervision of Consultant Obstetric Anesthesiologists.
- 3.2. The level of responsibility for each Fellow will depends on complexity of the patients, knowledge of the fellow and his/her sit of skills.

#### 4. Teaching

Fellows will supervise and teach the residents who usually rotate in the department from different levels of training. In addition, fellows will participate in the teaching of the nursing for competencies related to anesthesia

# **EVALUATION CRITERIA AND PROMOTION**

#### 1. Continual Evaluation

- 1.1. The Fellow's level of competence and performance will be evaluated at a frequency described in detail in the Policy for Fellowship Training Program.
- 1.2. At the end of the first and second year of the fellowship training program, the fellow will complete a written and oral examination, and all assessments given by their supervisors from various rotations.
- 1.3. Each fellow will receive a comprehensive evaluation at the end of rotation and at the end of year to highlight both strengths and weaknesses.

#### 2. Promotion

- 2.1. Yearly advancement is contingent upon professional performance and personal growth. The criteria for promotion are contingent upon monthly evaluations and end of year examinations.
- 2.2. Mandatory completion of at least five hundred logged cases registered during the two years training program. Proof of a case log must be presented upon request.

#### CERTIFICATION

- 1. Medical Education will award a Fellowship Certificate upon satisfactory completion of a final written and oral examination.
- 2. The final written and oral examinations will not be offered until the fellow has fulfilled all other requirements of the program.
- 3. Satisfactory completion will require satisfactory in-training evaluations in all other aspects of clinical training.

#### SCIENTIFIC COMMITTEE

#### 1. Members

- a. Dr. Nasser Tawfeeq, Chairman
- b. Dr. Rathore Raza, Member
- c. Dr. Salah Al Shagroud, Member

#### 2. Responsibilities

To provide a detailed plan on the scope, objectives and structure of the fellowship program, including description and specification of the:

- a. Educational standards of the training program
- b. Activities and responsibilities of the fellows at each level of training
- c. Nature and volume of clinical material available to the program.
- d. Teaching staff involved in the program
- e. Physical facilities and other resources available to the program.
- f. Proposed number of fellows during each year of the program.

In addition, the Program Scientific Committee is expected to:

- a. Review applications submitted to the Obstetrical Anesthesia Fellowship Program and thus determined who will be interviewed as a prospective candidate
- b. Interview prospective candidates
- c. Review the candidates submitted personal references
- d. Assign a score to the candidate based on the above information
- e. Review the selection process with Medical Education
- f. Meet every three months to discuss the candidate(s) performance
- g. Meet as required to discuss relevant issues related to the Fellowship Program
- h. Other duties that may arise

#### **FACULTY MEMEBRS**

#### 1. Members

- a. Dr. Nasser Tawfeeq
- b. Dr. Raza Rathore
- c. Dr. Abdulrazak Sibai
- d. Dr. Abdul Jabbar Qureshi
- e. Dr. Nasir Mahmood

# 2. Responsibilities

The obstetric anesthesia faculty is here to assist in any way they can to make your educational experience memorable. The faculty will provide academic guidance and mentoring for all fellows.

# ADMINISTRATIVE AND SECRETARIAL SUPPORT

#### 1. Members

- a. Dr. Nezar Al Zughaibi, Director of Anesthesia Fellowship & Residency Training Program
- b. Ms. Maha Al Otaibi, Secretary of Anesthesia Fellowship & Residency Training Program

### 2. Responsibilities

- a. Screen fellowship applicants, arrange for the selection interview; in coordination with Medical Education and the Program Scientific Committee
- b. Process approved applicants via Medical Education
- c. Receive new fellows and conducted necessary departmental orientation
- d. Schedule fellows' rotations in and outside the department
- e. Coordinate fellows educational activities in and outside KAMC-R
- f. Receive fellows' evaluations after each clinical rotation
- g. Arrange quarterly meetings of the Program Scientific Committee, minutes the meetings and communicate its decisions to concerned parties
- h. To report any concerns about the performance of the follows to the Program Scientific Committee
- i. Maintain complete and accurate record of the Program
- j. Produce Program statistics and reports

### ADMISSION REQUIREMENTS

Candidates must possess a medical degree from a recognized university and be Board Eligible, or fully Board Certified in the specialty of anesthesia by SCFHS or it equivalent. This includes having completed a formal Residency training in all subspecialties of Anesthesia, as well as having passed both written and oral Board examinations by SCFHS or its equivalent.

The following documents must be submitted to Medical Education:

- 1. Comprehensive curriculum vitae
- 2. Copy of the Board Certificate
- 3. Completed registration in SCFHS as Senior Registrar
- 4. Three letters of recommendation from consultants with whom he/she had recently worked for a minimum duration of six (6) months
- 5. Written permission from the sponsoring institution allowing full time participation for the full duration of the program
- 6. Copy of the Saudi ID/Passport
- 7. Three personal photographs

#### **HOLIDAYS & VACATIONS**

Regulations governing holidays are as per SCFHS. Fellows are entitled to:

- 1. Four weeks vacation annually
- have one Eid only as holiday for total 10 days. Emergency leave of total 10 days can be utilized under special circumstances
  - 3. One week study or conference leave.
  - 4. Compensation for sick and maternity leave that may either be during or at the end of the training.
  - 5. Holidays which are to be scheduled as not to interfere with the patient care or the overall rotation schedule.

# **APPENDIX**

# 1. Obstetric Anesthesia Academic Assignments

Topic	Objectives
Physiology of Pregnancy-1	<ol> <li>Review the Physiological changes durning Preganacy</li> <li>Review the anesthestic Implications of the Preganacy</li> </ol>
Physiology of Pregnancy-2	<ul><li>3. Review the Placenta: Anatomy, Physiology and Transfer of Drugs</li><li>4. Review the Uteroplacental Blood flow</li></ul>
Pharmacolgy of Local Anesthesia and Opioid	<ol> <li>Review the Pharmacology of Local Anesthesia</li> <li>Review the Pharmacology of Opioids</li> </ol>
Regional Anesthesia: Anatomy, Physiology and Technique	<ol> <li>Review the Anatomy and Physiology and Technique</li> <li>Review the role of the Ultrasound in Obstetrics.</li> <li>Review the Complications of Regional Anesthesia</li> </ol>
Intrauterine Fetal Assessment and neonatal Resuscitations	<ol> <li>Review the methods of intrauterine assessment</li> <li>Review the updated NRP guidlines</li> </ol>
Labour and Delivery	<ol> <li>Review the physiology of labour</li> <li>Review the mechanism of Labour pain and its on Mother and Fetus.</li> <li>Review the Preterm Labour and Abnormal presentation and mulitple gestations.</li> </ol>
Analgesia for Labour and Delivery	<ol> <li>Review the options of analgesia of Labour pain</li> <li>Review the evidance based medicine on Epidual, Spinal, Systemic analgesia for Labour pain</li> </ol>

# 2. Reference Material

Books	Journals
Advance Obstetric Anesthesia Principle and Practice; fourth edition; David H Chestnut; 2009.	of Obstetited
Schnider & Levinson's Anesthesia for Obstetrics; fourth edition; Samuel C Hughes, Gershon Levinson, Mark A Rosen; 2002.	.
Schnider & Levinson's Anesthesia for Obstetrics; fourth edition; Samuel C. Hughes, Gershon Levinson, Mark A. Rosen; 2002.	- The stress of
Evidence-Based Obstetric Anesthesia; first edition; Stephen H. Halpern, M. Joanne Douglas; 2005.	Anesthesiology
Williams Obstetrics; 22nd Edition & Study Guide; Cunningham et al.	Canadian Journal of Anesthesia
Orugs in Pregnancy & Lactation; 7th edition; Briggs et al.	New England Journal of Medicine
Cochrane Collaboration Pregnancy &	Cochrane Database
Childbirth Database; online.	Acta Anaesthesiologica Scandinavica
	Cardiology Circulation
	Journal of Obs & Gyne Canada (JOGC, SOGC)
	Obstetrics & Gynecology ("Green Journal")
I	American Journal of Obstetrics & Gynecology ("Grey Journal")

	Clinical Obstetrics & Gynecology
	Year Book of Obstetrics & Gynecology
des de la companya de	American Journal of Obstetrics and Gynecology
	Obstetrics & Gynecology
	Journal of fetal maternal and neonatal medicine

#### 3. In-training Monthly Evaluation Form

Saudi Commission
For Health Specialties

Fellow



الميئة السعودية للتخصصات الصحية

#### Fellow's In-Training Evaluation Name Hospital Reg# Retation Start End Level |: | OF1 DF2 Knowledge and Academic Activity Basic Science Clinical Science Current Literature 3. Participation in Scientific Activities Research Clinical and Technical Skills Organization of Work Records and Reports Interpretation and Utilization of Information Clinical Judgment and Decision-Making 10. Indications for Procedures Procedures and Operative Skills Performance in Emergencies Supervision and Consultations Attitudes and Ethics 14. Discipline and Reliability 15. Patient Relations 16. Inter-Professional Relations 17. Ethical Standards Total Score # Evaluated Items Total Score X 10 = 00.00% Comments: Evaluator Signature Date Director Signature Date

Signature

Date



Anesthesia RFTP, KAMC-R

# Fellows' Procedural Logbook

<u>Otabima4@ngha.med.sa</u> № 1311 **1** 17031

Date MRN Age/ASA Urgency Level OR Procedure Anse. Type Supervisor