Obstetric Anesthesia
Resident Orientation Packet
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# Obstetric Anesthesia

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1) Obstetric Anesthesia Resident Introduction

Welcome to the OB Anesthesia service!

The purpose of this document is to assist you during the OB Anesthesia rotation and to make the service run more efficiently. Our daily activities are different than those in the main OR. How is OB Anesthesia different? To begin with, you are no longer assigned to only a specific set of sequential cases each day; you must be flexible enough to change plans frequently. You are often responsible for several patients at one time!

You can affect your learning experience daily by your level of involvement. The more you are involved and aware, the more opportunities you will have to improve patient care by your presence and assistance with patient management. In general, the obstetricians are happy to discuss management of difficult patients with you, and are usually receptive to your suggestions.

As an obstetric anesthesiologist you are charged with providing care to a group of patients with needs ranging from fluid resuscitation to relief of pain during childbirth to providing anesthesia for an emergency cesarean section. The following is a representative list of the types of procedures you will be involved with.

I. Resuscitation and life threatening emergencies
   A. Maternal
      1. Hemorrhage, DIC, amniotic fluid embolus, severe hypertension, seizures
      2. The mother is your #1 responsibility.
   B. Fetal
      1. STAT cesarean section for fetal distress
      2. Recognize and treat fetal distress in utero in consultation with obstetricians.
      3. Resuscitation of the newborn (if pediatricians are not in attendance)

II. Anesthesia needed urgently
   A. Uterine exploration, removal of retained placenta
   B. Forceps or vacuum extraction
   C. Shoulder dystocia
   D. Manual breech extraction
   E. Multiple deliveries

III. Anesthesia for Vaginal Labor and Delivery
   A. Saddle Block/ Low Spinal Anesthesia
   B. Epidural (CLE)
   C. Combined spinal epidural (CSE)
   D. Conscious sedation with ketamine
   E. General anesthesia
IV. Scheduled Operative Cases
   A. Cesarean section
   B. Cerclage
   C. Post-partum bilateral tubal ligation
   D. Cesarean-hysterectomy (main OR)
   E. EXIT procedures (main OR)

V. Special Procedures
   A. Percutaneous Umbilical Blood Sampling (PUBS)
   B. Intrauterine Fetal Transfusion
   C. Breech Version
   D. Epidural Blood Patch

VI. Resources
   A. Attending
   B. Obstetricians
      1. “hot seat” 3rd year OB resident
      2. Senior/chief OB resident
      3. OB Attending
   C. RN
   D. Certified Nurse Midwife (CNM)
2) Orientation

I. Physical Orientation
   A. **Examination Room/Observation Room** is for the rapid evaluation of a patient who has been sent to L & D from the emergency room, clinic, physician’s office, or transported by ambulance or paramedic personnel. You may use this room to evaluate a patient before cesarean section.

   B. **Recovery Room** (RR) functions as the PACU for most obstetric patients. It may also be used as a preoperative preparation site. Patients may recover from surgery, deliveries, and anesthesia either in a LDR room, in the OB Recovery Room, or the main OR PACU (patients receiving General Anesthesia). After a cesarean section or delivery the nurse will obtain vital signs for you as in the PACU. There are two printed forms for patients receiving intrathecal or epidural opioids, one is for the PACU/RR orders and the other for ward care. Report should be given and patient status (vital signs, pain) as done in main OR.

   C. **Labor Rooms 1-4,9** These rooms are relatively small and equipped for labor, delivery, and recovery of patients with no anticipated labor or delivery complications.

   D. **LDR Rooms 5-8** Theses rooms are larger and can more easily accommodate the patient, father, obstetrician, nurse, anesthesiologist, and pediatric team. These rooms are used preferentially for patients with known potential for complication.

   E. **Operating Rooms 1-3**
      1. OR 1 is usually for neonatal evaluation and resuscitation as with multiple gestations, premature delivery and known abnormal neonate.
      2. OR 2 is used for cesarean sections, assisted vaginal deliveries, cerclage and tubal ligations
      3. OR 3 is used for cesarean sections, trial of forceps, delivery of patients with multiple gestations and disturbing fetal heart rate tracings. It should always be set-up for possible emergency c/s.
      4. Storage area between OR 1 and 2 where there is a warmer containing blankets and lactated Ringer’s solution.
3) Responsibilities

I. **Prior to 0640** check the OR (Delivery) rooms #2 and #3 for ability to provide urgent anesthesia care. Then attend Anesthesia conference from 0640-0700.
   A. Anesthesia machine checked
   B. Suction
   C. Monitors: there is full monitoring capability in every Delivery Room
   D. Airway
      1. ETT #5,6,7 should be checked and styleted. Pregnant women, especially those with preclampsia, can have edematous airway and require small ETT. They are all considered “full stomach” and at risk for aspiration.
      2. The short-handled (Datta) laryngoscope is designed especially for pregnant patients, who tend to have large chests and breasts. Be sure that there are 2 laryngoscope blades available, one of which should be a straight blade.
      3. LMA #3.5 and 4.5.
   E. IV
      1. A hotline should be available in room 3.
      2. An arterial line should be set up in room 3 with time, date and initialed.
      3. Call anesthesia technician to set up transducers for you if needed.
   F. Drugs
      1. Sign out Duramorph, versed, fentanyl and ketamine for PRN use.
      2. Have ready at all times in both DR #2 and #3
         a. Succinylcholine and etomidate in 10 ml syringes.
         b. Pitocin 20 units in 3 mL syringe
      3. For C/S a 20 ml syringe of 2% lidocaine with epinephrine and freshly added 2 ml of bicarbonate is a good idea for OR C/S when an epidural catheter is in place and fetus doing well. Chlorprocaine 3% is used if fetus is compromised.
      4. Ancef 1 gram

II. Whenever you take over from OB Anesthesia call at 0700 (0800 on Wednesday) or for on-call duty, get report of any complicated patients, as well as a listing of the patients with epidural catheters in place. Get the OB pager. (#5090) It is the responsibility of the OB Anesthesia call resident to leave OR 2 and 3 stocked prior to handing off the OB pager.

III. **From 0700 to 0745** Check the block carts, front board and L&D patients’ status. Introduce yourself to the patients with epidurals, check pain levels, vital signs, fetal heart rate, and update the chart.
   A. Block carts are stocked by Anesthesia Technicians and Pharmacy (meds) daily.
      1. Check for Mapleson system and masks
      2. Laryngoscopes with ETT #5 and 6.
3. Drugs drawn up: phenylephrine and ephedrine

B. The front board is the most comprehensive listing of activities on L&D.
   Check it periodically. Each patient has her age, gravity, parity, estimated gestational age, cervical exam, comments, absence or presence of regional anesthesia (which you should write on board yourself), nurse, and obstetrical caregiver listed. Also listed on the board are the patients in the observation room, those on transport and any complicated ante- or post-partum patients on the ward. Finally, on the far right side is a listing of caregivers for the day. Write your name and beeper number and Attending’s name and number on the board. Scheduled cases are listed on the main patient information. Introduce yourself to the charge RN and “hotseat” 3rd year OB Resident.

IV. **0745-0900** are morning rounds with the OB Attending. They usually discuss each patient on the board and discuss any management problems. Attend these rounds unless providing Ob patient care.

V. **Immediately after rounds** is a good time to check with the “hot seat” 3rd year OB resident about when they plan to perform their elective surgeries, which labor patients may need analgesia and which non-labor patients need a consultation.
   A. Patients from outlying clinics may be managed by nurse midwives. You should approach them with questions their patient’s care.
   B. Nurses on labor and delivery are very involved with their patients and can be a great help to you in assessing a parturient’s need for and response to analgesia.

VI. Update pt/fetal vital signs, exam and comfort level at least every 4 hours. (see 5. III. C)

VII. Interview all new patients admitted for delivery on the labor deck after consultation with their primary provider (‘hot seat” 3rd year OB resident or CNM) to ascertain likelihood of delivery within 24 hours. Note: if patient is strictly in for “observation” or treatment and is antepartum, no interview is needed.
4) Administrative/Paperwork
Completed each shift prior to departure

I. Every procedure requires an anesthesia record with a completed preoperative assessment and an Attending’s signature and order sheet(s). When the patient is delivered, complete delivery time, gender, APGAR etc and leave the white copy of the anesthesia record with the patient’s papers and the yellow and pink copies in the PACU bin. If for some reason the attending has not signed the chart, please make every effort to obtain his/her signature before they depart.
A. All “interactions” documented on chart.
B. Note: Patient is monitored for 2 hours after delivery prior to transport to 4th floor.
C. If patient is already on floor, place white copy on chart on floor.

II. Whenever you use controlled medications for a patient, record their use on your narcotic accounting sheet and document their use on the anesthesia record.

III. Anesthesia records are in the basket at the nurses’ station. Extra packs are in the storage closet in the hallway by Observation Room.

IV. In the “COMMENTS” section of the Obstetric Anesthesia Record, please include the age, GP, gestational age, FHR, cervical exam, fetal position and most recent vital signs with time and date. (Most of these data are available on L&D patient information board)
5) Goals and Learning Objectives for OB Anesthesia Rotation

I. General goals and competencies
   A. The resident will read the OB Anesthesia manual and chapter in any standard Anesthesia text a week prior to starting OB Anesthesia rotation.
   B. During the first week the resident will be working one on one with an OB Anesthesia faculty and will develop knowledge and skills in administering labor analgesia, (continuous labor epidural, combined spinal epidural anesthesia) anesthesia for uncomplicated C-section and bilateral tubal ligation.
   C. With completion of the rotation residents should demonstrate competence in caring for healthy parturients and an understanding of the management of high risk pregnant patients. This includes preoperative evaluation of C-section patients and those requesting labor epidurals, intra operative and post operative care using the current medical and obstetric knowledge relevant to each case; accessing on line medical information and OB anesthesia literature; providing compassionate patient care; communication effectively and working as a team with obstetric and nursing colleagues; demonstration ethical behavior; and practice quality but cost effective care.

II. Learning Objectives
   A. Technical skills
      1. Analgesia for labor-continuous labor epidural and combined spinal epidural and single shot spinals, local, IV analgesia
      2. Anesthesia for elective operative procedures
      3. Cesarean section, bilateral tubal ligation, cerclage, forceps delivery
      4. Analysis of fetal heart rate trace
      5. Anesthesia for emergent C-sections including epidural management, spinal placement in urgent cases and GA for C-section
      6. Post anesthetic evaluation and management of a parturient
      7. Identification of high risk pregnant patient and placement of arterial line, central venous line and blood gas analysis as required.
      8. Postoperative analgesia
      9. Post dural puncture headache management
     10. Management of the epidural pump and PCEA settings
   B. Cognitive skills
      2. High risk pregnancy/complicated pregnancy-Anesthesia for no obstetric procedures, diabetes, hypertension, cardio respiratory disease, renal disease, substance abuse, fetal demise, Rh and ABO
incompatibilities, ectopic pregnancy and trophoblastic disease, multiple pregnancy, obstetric hemorrhage, vaginal birth after C-section and breech delivery

3. Newborn resuscitation-evaluation and APGAR scoring neurobehavioral testing, pharmacology of neonatal resuscitation, umbilical cord blood gas measurements

4. Anesthesia for fetal surgery

5. Anesthesia for assisted reproductive technology

6. Management of Code OB

III. Clinical Responsibilities

A. The **attending must be present for start of all anesthetics/analgesics** and the case should be discussed with the attending before taking the patient into the operating room for all elective cases. For emergency cases make sure the attending is paged STAT to the delivery rooms.

B. As the only scheduled resident on the rotation, the primary responsibility of the OB anesthesia resident is management of anesthesia in the labor and delivery area. Residents should know at all times the progress of labor and status of delivery and have an anesthetic plan for patients admitted in the L and D suite.

C. Patients receiving an epidural should be **assessed at least every 4 hours** by an anesthesia provider in the OB suite, with a **brief note** on chart as to patient status (ie comfortable, pushing, R leg heavier than left, etc) and fetal/maternal vital signs.

IV. Resident Competencies

A. **Patient care:** Residents must be able to provide patient care that is appropriate, compassionate and effective for the obstetric population and must be particularly sensitive to the patient’s needs and the needs of their family

B. **Medical knowledge:** Residents must be able to demonstrate knowledge about established medical and obstetric issues and apply this knowledge for effective clinical care.

C. **Interpersonal and Communication skills:** Residents must be able to demonstrate good communication skills with the patients, their families, labor and delivery nurses and obstetrical colleagues to be able to provide expeditious care by effective OB floor management.

D. **Professionalism:** Residents must be able to demonstrate a commitment to fulfilling their daily assignments and call responsibilities, adhere to ethical principles, show practice improvement techniques and fill out faculty evaluations on time.

E. **Practice based learning and improvement:** Residents in the 1st week of the rotation should be closely supervised by the OB anesthesia attending working one on one with them. As they progress to their 2nd week they should be comfortable in providing analgesia for uncomplicated
pregnancies. During the last part of their rotation they should develop competence in understanding the pathophysiology of sicker patients.

F. *Systems based practice:* Residents should learn and practice obstetric anesthesia in different settings including the delivery rooms, operating rooms, emergency rooms and the postpartum floor. They should understand how triaging OB patients happens and respect the patient’s wishes regarding natural child birth.
6) Didactics

I. Reading: There is an enclosed list of topics and suggested reading that you are responsible for during your OB rotation. Note that some areas should be reviewed prior to your arrival on the first Monday morning at 0700. Shnider’s Anesthesia for Obstetrics and Chestnut’s Obstetric Anesthesia are in the library.

II. Attend OB teaching rounds at 0745 each morning when possible.

III. On weekdays there is a teaching session with the attending. You will receive a list of topics. You should read the appropriate chapter in Chestnut or other suitable text prior to that session.

IV. Chose a topic to present during the month from the OB Anesthesia Rotation Topics List.

V. OB Orientation Topics presented by OB Anesthesia Attending’s during the first week.
   A. Orientation to Labor and Delivery—Review Orientation Packet
   B. Physiologic Changes of Pregnancy
   C. OB Analgesia/Anesthesia
      1. Spinal
      2. Epidural (CLE)
      3. Combined Spinal-Epidural (CSE)
      4. General Anesthesia
   D. Pregnancy Induced Disorders
      1. PIH
      2. Preeclampsia
      3. Gestational Diabetes
   E. Monitoring of Labor
      1. Stages of Labor
      2. Fetal heart rate
   F. Hemorrhage
      1. Antepartum
      2. Postpartum
7) Obstetric Anesthesia Rotation Topics

I. Maternal Physiology
   A. Effects of Pregnancy on Uptake and Distribution
   B. Respiratory (Anatomy, Lung Volumes and Capacities, Oxygen Consumption, Ventilation, Blood Gases, Acid Base)
   C. Cardiovascular (Aorto-caval Compression, Regulation of Uterine Blood Flow)
   D. Renal
   E. Liver (Albumin/Globulin Ratio, Protein Binding of Drugs)
   F. Gastrointestinal (Gastric Acid, Motility, Anatomic Position, Gastroesophageal Sphincter Function)
   G. Hematology (Blood Volume, Plasma Proteins, Coagulation)
   H. Placenta
      1. placental exchange - O2, CO2
      2. placental blood flow
      3. barrier function

II. Maternal-Fetal
   A. Pharmacology
      1. anesthetic drugs and adjuvants
      2. oxytocic drugs (indications, adverse effects)
      3. tocolytic drugs (indications, adverse effects)
      4. antiseizure drugs; interactions (magnesium sulfate)
      5. mechanisms of placental transfer
      6. fetal disposition of drugs
      7. drug effects on newborn
   B. Amniotic Fluid (Amniocentesis, Oligohydramnios, Polyhydramnios)
   C. Antepartum Fetal Assessment and Therapy (Ultrasonography, Fetal Heart Rate Monitoring)
   D. Anesthetic Techniques and Risks (Elective vs. Emergency, General vs Regional)
      1. systemic medications: opioids, sedatives, inhalational agents
      2. regional techniques
         a. epidural, caudal, spinal, combined spinal/epidural
         b. paracervical block, lumbar sympathetic block, pudendal block
      3. complications (aspiration, nerve palsies)
   E. Physiology of Labor (Metabolism, Respiration, Thermoregulation) without Epidural
   F. Influence of Anesthetic Technique on Labor
   G. Cesarean Delivery: Indications, Urgent/Emergent, Anesthetic Techniques and Complications, Difficult Airway, Aspiration Prophylaxis
III. Pathophysiology of Complicated Pregnancy

A. Problems During Pregnancy and Delivery
   1. anesthesia for cerclage or non-obstetric surgery
   2. ectopic pregnancy
   3. spontaneous abortion
   4. gestational trophoblastic disease (hydatid mole)
   5. autoimmune disorders (lupus, antiphospholipid syndrome)
   6. endocrine (thyroid, diabetes, pheochromocytoma)
   7. heart disease (valvular disorders, pulmonary hypertension, congenital heart disease, arrhythmias, cardiomyopathy)
   8. hematologic (sickle cell anemia, idiopathic thrombocytopenic purpura, von Willebrand disease, Disseminated Intravascular Coagulation, (DIC), anticoagulant therapy, Rh and ABO incompatibility)
   9. hypertension (chronic, pregnancy-induced) and B.2.
   10. neurologic (seizures, myasthenia, spinal cord injury, multiple sclerosis, subarachnoid hemorrhage)
   11. respiratory (asthma, respiratory failure)
   12. renal
   13. human immunovirus infection

B. Problems of Term and Delivery
   1. intrapartum fetal assessment (fetal heart rate monitoring, fetal scalp blood gases, fetal pulse oximetry)
   2. preeclampsia and eclampsia and A.9
   3. supine hypotensive syndrome
   4. aspiration of gastric contents
   5. embolic disorders (amniotic fluid embolism, pulmonary thromboembolism)
   6. antepartum hemorrhage (placenta previa, abruptio placenta, uterine rupture) and B.7
   7. postpartum hemorrhage (uterine atony, placenta accreta) and B.6
   8. cord prolapse
   9. retained placenta
   10. dystocia, malposition, and malpresentation (breech, transverse lie)
   11. maternal cardiopulmonary resuscitation
   12. fever and infection
   13. preterm labor
   14. vaginal birth after cesarean section (VBAC)
   15. multiple gestation

C. Resuscitation of Newborn (all one topic)
   1. Apgar scoring
   2. umbilical cord blood gas measurements
   3. techniques and pharmacology of resuscitation
   4. intrauterine surgery (maternal and fetal considerations, intrauterine fetal resuscitation)
Appendix: 1) Protocols for Anesthesia/Analgesia Labor and Delivery

I. LABOR EPIDURAL - Patient Controlled Epidural Analgesia (PCEA)
   *Placed when requested by obstetrician whose patient is committed to deliver and has pain, regardless of the cervical dilation.
   *No need to wait for coags unless preeclamptic or bleeding history.
   *Minimum 500 ml LR in good 18 gauge IV +/- Bicitra
   A. Placed at L3/4 or L2/3 with patient sitting or lateral decubitus positioning
   B. Loss of resistance to saline, saline plus air bubble, or air (attending choice)
   C. Test dose: 3 ml Lidocaine 1.5% with Epinephrine 15mcg (standard)
      Note: may add remaining 2 ml if patient very uncomfortable and Test negative
   D. Loading Dose: 10 ml of bag solution or Bupivicaine 0.125% plain
   E. PCEA bag solution of Bupivicaine 0.1% with Fentanyl 2 mcg/ml
      Background rate: 5-10 ml/hr
      Patient bolus: 5-6 ml every 5-15 minutes to a maximum of 15-25 ml/hr

II. CSE
   *Especially helpful with patients in late labor who may deliver within the hour. Note that testing of epidural for subarachnoid or IV is not possible if local is used in the spinal.
   A. Place epidural as in a. & b. above
   B. Spinal dose:
      1. Fentanyl 20 mcg (0.4 ml) or
      2. 1 ml of Bupivicaine 0.25% +/- Fentanyl 5-10 mcg (0.1-0.2 ml) or
      3. 3 ml of bag solution (Bupivicaine 0.1% with Fentanyl 2 mcg/ml)

III. PERINEAL DOSE FOR FORCEPS, EPISIOTOMY, LACERATION REPAIR
   *Cases which might precipitate a C/S or require better visualization will often be done in DR #2 and usually require anesthesia assistance with bolus dosing of an existing epidural. Once the mom is stable from the small bolus, the anesthesia provider may leave to attend to other patients.
   A. Epidural perineal dose: 5 ml of Lidocaine 2% with Bicarb
   B. Spinal placement if no epidural (see #5).
IV. C/S

*Mom is given 30 ml of Bicitra within 30 minutes of all cesarean section deliveries. Consider other Antiemetic (H-2 antagonist and/or metoclopramide).
*Treat hypotension aggressively in DR.
*All jewelry, especially body piercing (to include nose and umbilical rings and tongue studs) should be removed prior to this operative procedure.
*Concentrated solutions should not be administered in an unmonitored setting, as prior to transport from the LDR to the DR.

A. Spinal dose: 1.4 ml of Bupivicaine 0.75% + Duramorph 0.1-0.2 mg (0.1-0.2 ml) +/- Fentanyl 10-25 mcg (0.2-0.5 ml) +/- Epinephrine 50-200 mcg (trace-0.2 ml of 1:1000)
B. In situ Epidural: up to 20 ml in 5 ml increments to achieve T4 level of anesthesia
   1. Lidocaine 2% with Bicarb 1ml/10ml +/- Epinephrine 5 mcg/ml (1:200,000) or
   2. 3% Chlorprocaine (if fetus compromised) or
   3. Bupivicaine 0.5%

C. General Anesthesia:
*Always rapid sequence (or awake if airway indicates anticipated difficulty) with cricoid pressure after mom monitored, LUD, O2 Face Mask, prepped and draped and surgeons ready to cut.
Use styletted 6 or 7 ETT (5 backup). LMA & Combitube in drawer.
*COMMUNICATE WITH SURGEONS WHEN IT IS OK TO “CUT” (Attending’s choice to “Cut” after induction or to Verify +ETCO2 prior to skin incision.)

   1. Induction with Etomidate or Propofol
   2. Maintenance with 50% O2/50% N2O and Sevo at <0.5 MAC after baby is born 70/30 and have morphine ready
   3. OG suction when possible

V. TUBAL LIGATION, CERCLAGE

*Hormonal effects in play, but lung volumes normal.
*Must stay with patient for monitoring until procedure complete.

A. Spinal dose: 1-1.4 ml of bupivicae 0.75%
B. Spinal dose: 0.7 ml of bupivacaine 0.75% + 20 ug fentanyl (0.4 ml) + diluted with 1.9 ml of sterile preservative free saline = total 3 ml.
C. General Anesthesia not usual choice; if used, must be rapid sequence due to relaxed LES even if NPO x 8 hrs.
## Appendix: 2) List of Abbreviations

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<th>Abbreviation</th>
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<tr>
<td>AB</td>
<td>Abortion</td>
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<tr>
<td>SAB</td>
<td>Spontaneous Abortion</td>
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<tr>
<td>EAB</td>
<td>Elective Abortion</td>
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<tr>
<td>TAB</td>
<td>Therapeutic Abortion</td>
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<tr>
<td>GAB</td>
<td>Genetic Abortion</td>
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<tr>
<td>AFI</td>
<td>Amniotic Fluid Index (Determination Made by Ultrasound)</td>
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<tr>
<td>ALC</td>
<td>A La Casa</td>
</tr>
<tr>
<td>AROM</td>
<td>Artificial Rupture of Membranes</td>
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<tr>
<td>AUB</td>
<td>Abnormal Uterine Bleeding</td>
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<tr>
<td>BBOW</td>
<td>Bulging Bag of Water</td>
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<tr>
<td>BCP</td>
<td>Birth Control Pills</td>
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<tr>
<td>BMZ</td>
<td>Betamethasonone</td>
</tr>
<tr>
<td>BPP</td>
<td>Biophysical Profile (Ultrasound Determination of Fetal Well Being)</td>
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<td>BPD</td>
<td>Biparietal Diameter (Ultrasound Measurement)</td>
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<tr>
<td>BSO</td>
<td>Bilateral Salpingo-Oophorectomy</td>
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<tr>
<td>BTBV</td>
<td>Beat to Beat Variability (Comment about Fetal Monitoring)</td>
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<tr>
<td>LTV</td>
<td>long-term variability</td>
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<tr>
<td>STV</td>
<td>short-term variability</td>
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<tr>
<td>BTL</td>
<td>Bilateral Tubal Ligation (&quot;Beetle&quot;)</td>
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<tr>
<td>CNM</td>
<td>Certified Nurse Midwife</td>
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<tr>
<td>CPD</td>
<td>Cephalopelvic Disproportion</td>
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<tr>
<td>C/S</td>
<td>C-Section / R-repeat / P-Primary</td>
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<td>CST</td>
<td>Contraction Stress Test</td>
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<td>CTX</td>
<td>Contraction</td>
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<tr>
<td>D&amp;C</td>
<td>Dilatation and Curettage</td>
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<td>D&amp;E</td>
<td>Dilatation and Evacuation</td>
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<tr>
<td>DMPA</td>
<td>Depo-Provera (Depo Medroxyprogesterone Acetate)</td>
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<tr>
<td>DUB</td>
<td>Dysfunctional Uterine Bleeding</td>
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<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>EDC</td>
<td>Estimated Date of Confinement (“Due Date”)</td>
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<tr>
<td>EFM</td>
<td>External Fetal Monitoring</td>
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<td>EGA</td>
<td>Estimated Gestational Age</td>
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<td>FAU</td>
<td>Fetal Assessment Unit</td>
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<td>FH</td>
<td>Fundal Height</td>
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<td>FHT</td>
<td>Fetal Heart Tones</td>
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<td>FHR</td>
<td>Fetal Heart Rate</td>
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<td>FLM</td>
<td>Fetal Lung Maturity</td>
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<tr>
<td>FM</td>
<td>Fetal Movement (if under “clinic heading” on front board-FM Family Medicine)</td>
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<tr>
<td>FSE</td>
<td>Fetal scalp electrode</td>
</tr>
<tr>
<td>GFM</td>
<td>Good Fetal Movement</td>
</tr>
<tr>
<td>GFPAL</td>
<td>Gravida, Full-term deliveries, Preterm deliveries, Abortions, Living children</td>
</tr>
<tr>
<td>GP</td>
<td>Gravida, Para</td>
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<tr>
<td>GTT</td>
<td>Glucose tolerance test</td>
</tr>
<tr>
<td>HELLP</td>
<td>Hemolysis, elevated liver enzymes, low platelets (Variant of Severe PIH)</td>
</tr>
<tr>
<td>HROB</td>
<td>High Risk Obstetrics Clinic</td>
</tr>
<tr>
<td>HRT</td>
<td>Hormone Replacement Therapy</td>
</tr>
<tr>
<td>IUFD</td>
<td>Intrauterine Fetal Demise</td>
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<tr>
<td>IUGR</td>
<td>Intrauterine Growth Restriction</td>
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<tr>
<td>IUP</td>
<td>Intrauterine Pregnancy</td>
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<tr>
<td>IUPC</td>
<td>Intra-uterine pressure catheter</td>
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<tr>
<td>L&amp;D</td>
<td>Labor and Delivery</td>
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<tr>
<td>LDR</td>
<td>Labor and Delivery Room</td>
</tr>
<tr>
<td>LGA</td>
<td>Large for Gestational Age</td>
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</tbody>
</table>
LMP  Last Menstrual Period
LOA  Lysis of Adhesions
LOF  Leakage of Fluid
LTCS  Low Transverse C-Section
NPC  No prenatal care
NST  Non-Stress Test (positive result FHR acceleration-good)
NSVD  Normal Spontaneous Vaginal Delivery
OCM  Oral Contraceptive Pill
OCT  Oxytocin Challenge Test(positive result is FHR deceleration-bad)
PCC  Primary Care Clinic
PIH  Pregnancy Induced Hypertension
Pit  Pitocin infusion
PNA  Perinatal Assessment
PNV  Prenatal Vitamins
PPD  Post-Partum Day
PPROM  Preterm Premature Rupture of Membranes
PROM  Premature Rupture of Membranes
PTL  Preterm Labor
ROM  Rupture of Membranes
SAB  Spontaneous abortion or spinal anesthesia
SGA  Small for Gestational Age
SROM  Spontaneous Rupture of Membranes
VBAC  Vaginal Birth after C-Section
<table>
<thead>
<tr>
<th>Subject</th>
<th>Date</th>
<th>Duration</th>
<th>Attending’s Initials</th>
<th>Attending’s Signature</th>
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<tbody>
<tr>
<td>Orientation to Labor and Delivery-Review of Packet</td>
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<tr>
<td>Physiologic Changes of Pregnancy</td>
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<tr>
<td>OB Analgesia/Anesthesia: Spinal, Epidural, Combined Spinal Epidural</td>
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<td>Pregnancy Induced Disorders: PIH, Preeclampsia, Gestational Diabetes</td>
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<td>Monitoring of Labor: Stages of Labor, Fetal Heart Rate</td>
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<tr>
<td>Hemorrhage: Antepartum, Postpartum</td>
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</table>