

OB

EMERGENT CESAREAN SECTION

Estimated Time: 30 minutes • Debriefing Time: 30 minutes



Scan to Begin



Patient Name: Olivia Brooks

SCENARIO OVERVIEW

Olivia Brooks is 28-year-old female who presented to the hospital twelve hours ago in active labor at 40w1d gestational age. As she progressed to cervical dilation 8 cm, she developed Category 3 fetal heart tones with intermittent late decelerations and light meconium stained fluid. Students will prepare the patient for an emergent Cesarean Section and provide appropriate therapeutic communication to the patient and her husband as they prepare to go into the operating suite. She does have an epidural in place.

This scenario can be used for high- or low-fidelity simulation. In high-fidelity simulation, the patient videos and tabbed chart content can be used to augment the reality of the simulation. In low-fidelity simulation, the instructor can use role play, in association with the scenario content, to stimulate student critical thinking and discussion about prenatal care topics.

Videos of the husband at the bedside are provided. Someone can continue to role-play the husband's role throughout the scenario.

LEARNING OBJECTIVES

1. Maintain a safe, effective health care environment for an emergent Cesarean section labor patient
2. Differentiate between reassuring and non-reassuring fetal heart rate patterns
3. Identify appropriate nursing actions when non-reassuring fetal heart rate patterns are observed
4. Implement pre-op Cesarean section orders
5. Utilize therapeutic communication with the patient and family member before emergent surgery

CURRICULUM MAPPING

WTCS NURSING PROGRAM OUTCOMES

- Implement one's role as a nurse in ways that reflect integrity, responsibility, ethical practices, and an evolving professional identity as a nurse committed to evidence-based practice, caring, advocacy and quality care
- Demonstrate appropriate written, verbal, and nonverbal communication in a variety of clinical contexts
- Integrate social, mathematical, and physical sciences, pharmacology, and pathophysiology in clinical decision making
- Provide patient centered care by utilizing the nursing process across diverse populations and health care settings
- Minimize risk of harm to patients, members of the healthcare team and self through safe individual performance and participation in system effectiveness
- Use information and technology to communicate, manage data, mitigate error, and support decision-making

NURSING FUNDAMENTALS

- Maintain a safe, effective care environment for adults of all ages
- Use appropriate communication techniques

- Use the nursing process
- Adapt nursing practice to meet the needs of diverse patients in a variety of settings

NURSING HEALTH PROMOTIONS

- Use principles of teaching/learning when reinforcing teaching plans
- Apply principles of family dynamics to nursing care

NURSING HEALTH ALTERATIONS

- Plan nursing care for patients undergoing surgery

SIMULATION LEARNING ENVIRONMENT & SET-UP

ENVIRONMENT: LABOR AND DELIVERY ROOM

Inside room: Vital signs equipment

Inside or outside room: Sanitizer or sink for hand hygiene; PPE for surgery

Scenario time: Patient arrived to the hospital at 0700; it is now 1900

Facilitator Note: Before scenario, create the LMP and EDC based on current date so that gestational age is 40 weeks and 1 day.

PATIENT PROFILE

Name: Olivia Brooks

AB: 1

DOB: 01/29/19XX

Number living: 0

Age: 28 years old

LMP: X/X/20XX

MR#: 12919

EDC: X/X/20XX

Gender: Female

Gestational Age: 40w1d

Height: 162.5 cm (5'5")

Blood Type: A neg

Admission Weight: 89.1 kg (196 lbs)

Code Status: Full

Allergies: NKDA

Ethnicity: Caucasian

Gravida: 2

Spiritual Practice: Lutheran

Para: 0

Primary Language: English

EQUIPMENT/SUPPLIES/SETTINGS

Patient

- Wearing hospital gown
- Epidural in place
- On continuous fetal monitoring (if available); displaying Category III fetal heart tones (intermittent late decelerations) with contractions every 3 minutes lasting 60 sections

Monitor Settings

- Vital signs: 120/80, HR 92, RR 22, Temp 98.6, O2 sat 100%

Supplies

- Fetal heart monitoring (if available)
- Medications:
 - Cefazolin IV 2g/100 ml
 - Lactated Ringers IV 250ml
 - Oxytocin IV 30 units in LR 500ml
 - Naloxone IV 0.4mg/ml
- Sequential compression device (if available)
- Foley catheter
- Incentive spirometer
- Hair clip (if available)

QR CODES

<p>START</p> 	<p>PATIENT</p> 	<p>REPORT</p> 	<p>FACILITATOR</p> 
<p>FAMILY MEMBER</p> 	<p>C SECTION DELIVERY</p> 	<p>CATEGORY 3 FETAL MONITORING</p> 	<p>PATIENT ID</p> 
<p>OXYTOCIN IV</p> 	<p>CEFAZOLIN IV</p> 	<p>LACTATED RINGERS IV</p> 	<p>NALOXONE IV</p> 
<p>SODIUM CITRATE PO</p> 	<p>RANITIDINE PO</p> 	<p>METOCLOPRAMIDE IV</p> 	

TEACHING PLAN

PREBRIEF

The facilitator should lead this portion of the simulation. The following steps will guide you through Prebrief.

- Scan the **QR Code: “Scan to Begin”** while students are in Prebrief.
- “Meet Your Patient” (on iPad) and explain how the iPad works in the simulated learning environment including:
 - Explain how to use the iPad scanner and QR codes. Remind students that there are multiple QR codes in the simulation, but they should only scan them if they think it will provide data necessary for their assessment and evaluation of the patient.
 - Medication Hyperlinks – Medications are hyperlinked to DailyMed, which is a medication reference housed by the National Library of Medicine. Students can click on these links during the simulation for up-to-date medication content, labels, and package insert information.
 - As the facilitator, you should be aware that throughout the simulation some QR codes are necessary to the programming of the iPad content. Directions for which QR codes are required (to be scanned) in each state are listed under each state of the documentation below. The QR codes are also in **BOLD** type.
 - Level tab – This tab “tells” the content in the iPad to change to what is needed for the next state of a simulation.
- Discuss the simulation “Learning Objective(s)” (on iPad) as well as any other Prebrief materials
- View “Report” on iPad
 - Possible Facilitator Questions
 - Describe Category 3 fetal heart tones and what they indicate
 - Note: may scan **QR Code: Category 3 Fetal Monitoring** at any time during the scenario to view these findings
 - What does “light meconium stained fluid” indicate?

- What interventions should you verify were completed in response to the late decelerations?
 - What other interventions should be implemented based on the patient's current condition?
- View patient video
 - Possible Facilitator Questions
 - Why is an Emergency C-section indicated at this time?
 - How will you explain the current situation to the patient and her spouse using therapeutic communication, but not using false reassurance?
- View family member video
 - Possible Facilitator Questions:
 - How will you respond to the spouse's concerns therapeutically?
 - What instructions will you provide to the spouse before entering the operating suite? Note: A patient education handouts on Cesarean sections is provided under the Patient Education tab
 - Sometimes the spouse becomes your "third patient." Describe how you will monitor the spouse's status during the procedure.

PATIENT PROFILE

Patient demographic information is displayed here

EDC CALCULATOR

LMP can be entered to calculate EDC

OB/GYN HISTORY

OB/GYN History

PAST MEDICAL HISTORY: 28-year-old healthy female with history of genital herpes and mixed anxiety depressive disorder.

SURGICAL HISTORY: Tonsillectomy age 12; Wisdom teeth extraction age 18; D&C after miscarriage

FAMILY HISTORY: Father with hypertension; mother with diabetes mellitus, maternal grandmother with breast cancer

SOCIAL HISTORY: Lives in Anytown, WI with her husband and 2 cats.

TOBACCO USE: Smoked 1 ppd until discovered was pregnant.

ALCOHOL USE: Binge drinking on weekends (6 drinks or more/night) until discovered she was pregnant.

DRUG USE: Denies.

EDUCATION: High school graduate.

EMPLOYMENT HISTORY: Works as a C.N.A. at local skilled nursing facility where helps transfer patients from bed to wheelchair.

MENSTRUAL HISTORY:

ONSET: age: 12 yrs **CYCLE:** 30 days **DURATION:** 5 days

LMP: XX/XX/20XX

PAST PREGNANCY HISTORY:

Date	Weeks Gest.	Length Labor	Type Delivery	Anesth.	Weight	Remarks
2016	12 wks	---	---	---	---	Spontaneous AB

- Suggested facilitator question:
 - Does the patient have any contraindications to surgical delivery?

PRENATAL RECORD

Date	8wk	16wk	20wk	24wk	28wk	32wk	36wk	38k	40wk
Weeks Gestation	8w3d	16w5d	20w2d	24w5d	281d	32w6d	36w1d	38w	40w
Weight	156 lb	158 lb	161 lb	166 lb	169 lb	173 lb	178 lb	180 lb	182 lb
BP	110/64	112/68	118/72	114/70	116/76	120/72	122/74	124/76	126/76
Fundal Height	---	16 cm	20 cm	24 cm	28 cm	33 cm	37 cm	39 cm	41 cm
Position/ Presentation	---	---	---	vertex	vertex	vertex	vertex	vertex	vertex
Station	---	---	---	---	---	---	-3	-3	-2
FHT	---	150	168	132	150	156	132	144	156
Edema	neg	neg	neg	neg	1+	1+	2+	2+	2+
Urine glucose and protein	---	neg	neg	neg	neg	neg	neg	neg	neg
Contractions	---	---	---	---	---	---	---	---	+
Fetal Activity	---	---	---	Pos	Pos	Pos	Pos	Pos	Pos
Non-stress test	---	---	---	---	---	---	---	---	---
Provider	BB	BB	BB	BB	BB	BB	BB	BB	BB

Progress Notes

Date/Time	Note
8 wks	First prenatal visit; no complaints, excited regarding pregnancy. --- BB
12 wks	Missed appointment; called and stated had mandatory call at work. --- BB
16 wks	Doing well, denies any complaints. Reviewed 2 nd trimester changes and to schedule 20-week ultrasound. --- BB
20 wks	Ultrasound prior to appointment confirmed due date. Has backache, will try occasional Tylenol and stretching exercises. --- BB
24 wks	Backache improving, feeling quickening. Discussed prep for GCT at next appointment. --- BB
28 wks	1+ edema, worse after shift standing at work. Discussed L&D prep classes. GCT and Rhogam today. --- BB
32 wks	Edema same, trying to keep legs elevated after work. Discussed pain management option for L&D, prefers IM, IV meds. Possible epidural OK.

	Group B strep culture at next appointment. No herpes breakouts during pregnancy. --- BB
36 wks	Discussed signs of preterm labor and when to go to L&D. --- BB
38 wks	Discussed need for IV antibiotics in labor due to positive Group B strep culture. --- BB
40 wks	Reports some occasional Braxton Hicks contractions. Feels baby moving frequently. Discussed birth plan and desire for epidural. ----BB

GENETICS SCREENING

Genetics Screening	Response (Yes/No)	Family Member
Patient Age > 35 years?	No	
Italian, Greek, Mediterranean, Oriental Background (if MCV<80)	Yes	
Jewish background (Tay Sachs)	No	
History of Neural Tube Defect?	No	
History of Down's Syndrome?	Yes	Paternal uncle's baby
History of Sickle Cell Disease or Trait?	No	
History of Hemophilia?	No	
History of Cystic Fibrosis?	No	
History of Congenital Heart Disease?	Yes	Sister's baby
History of Muscular Dystrophy?	No	
History of Huntington Chorea?	No	
Patient had child with birth defect not listed above, >3 first trimester abortions, or stillbirths?	No	
Baby's father had child with birth defect not listed above, >3 first trimester abortions, or stillbirths?	No	
Medications or street drugs since LMP?	Yes	

PRE-OP CHECKLIST

List	Completed
Obtain consent from the patient after explaining the procedure and the reason for it.	<input type="checkbox"/>
Notify pediatrician	<input type="checkbox"/>
Notify the OR	<input type="checkbox"/>
Notify anesthesia	<input type="checkbox"/>
Check the patient's hemoglobin concentration, but do not wait for the result if there is fetal or maternal distress or danger. Send the blood sample for type and screen. If the patient is severely anemic, plan to give two units of blood.	<input type="checkbox"/>
Start an IV infusion.	<input type="checkbox"/>
Have antibiotics available to administer after delivery of the placenta	<input type="checkbox"/>
Give sodium citrate 30 ml and/or ranitidine 150 mg orally to reduce stomach acidity. Sodium citrate works for 20 minutes only so should be given immediately before induction of anesthesia if a general anesthetic is given.	<input type="checkbox"/>
Catheterize the bladder and keep a catheter in place during the operation.	<input type="checkbox"/>
If the baby's head is deep down into the pelvis, as in obstructed labor, prepare the vagina for assistance at caesarean delivery.	<input type="checkbox"/>
Roll the patient 15° to her left or place a pillow under her right hip to decrease supine hypotension.	<input type="checkbox"/>
Listen to the fetal heart rate before beginning surgery.	<input type="checkbox"/>

ORDERS

Date	Time	Order
Today	Now	<p>CESAREAN PRE-OP ORDER SET</p> <ul style="list-style-type: none"> - Notify Operating Room of Cesarean Section Request - IV Fluids: -Lactated Ringers IV at 125 cc/hr - Diet: NPO - Consent: Verify informed consent for procedure - Medications: -Cefazolin 2 grams IV once within 60 minutes of surgical incision. If allergy to Penicillin give Clindamycin IV 900mg once within 60 minutes of surgical incision -Uterotonic agent: Oxytocin 30 units in LR 500ml IV at 125 cc/hour continuous. Start after placenta delivered to titrate and control uterine atony -Sodium citrate 30 ml PO 30-45 minutes prior to induction of anesthesia -Metoclopramide 10 mg IV prior to anesthesia x1 -Ranitidine 150 mg PO prior to anesthesia x 1 - DVT mechanical pre-op prophylaxis: -Place, assess and maintain sequential compression device pre-operatively - Labs: -Verify CBC with differential completed -Blood bank type and screen - Nursing -Insert Foley catheter; may be inserted after spinal block -Surgical prep: hair removal abdominal clip, pre-op -Fetal monitoring pre-op -Incentive spirometer routine every 2 hours while awake -Notify pediatrician if: <ul style="list-style-type: none"> -temp greater than equal to 38.5 degrees Celsius - Any evidence of abnormal presentation - Category II or Category III fetal heart rate - Significant vaginal bleeding - O2 saturation less than 90% or supplemental oxygen - Urinary output less than 30 mL/hour for 2 hours - Meconium stained fluid -If positive drug screen on mother, limited or no prenatal care, GBS positive mother or known anomalies
		---- B. Barker, MD

MAR

Medication Administration Record

Scheduled		
Cefazolin 2 grams IV once within 60 minutes of surgical incision	Due Today	Last Given
Oxytocin 30 units in LR 500ml IV at 125 cc/hour continuous. Start after placenta delivered to titrate and control uterine atony	Due Today	Last Given
Sodium citrate/citric acid oral solution 3g/2g 30 ml PO 30-45 minutes prior to the induction of anesthesia	Due Today	Last Given
Metoclopramide 10 mg IV prior to anesthesia x 1	Due Today	Last Given
Ranitidine 150 mg PO prior to anesthesia x 1	Due Today	Last Given
Continuous Infusion		
Lactated Ringers at 125 ml/hour	Started	
	10 minutes ago	
Epidural continuous infusion with fentanyl 2mcg/mL and Bupivacaine 0.125% epidural 10mL/hr	Maintained by anesthesia	
PRN		
Naloxone 0.4mg ampule available at all times; if respiratory rate < 9/minute, stop the infusion, give naloxone 0.4mg STAT and immediately notify the anesthesiologist		
Discontinued		
Lactated Ringers 1000 ml bolus	Last Given	
	8 hours ago	
	4 hours ago	

IMMUNIZATIONS

A link is also provided to the CDC Guidelines for Vaccinating Pregnant Women.

Immunization Record	Date Received
Hepatitis A	Never
Hepatitis B	1/30/1990, 3/2/1990, 7/5/1990
Haemophilus influenzae type b4 (Hib)	3/2/1990, 5/7/1990, 2/1/1991
HPV	Never
Influenza	12/14/2016
Measles, mumps, rubella (MMR)	2/1/1991
Pneumococcal	Never
IPV – Inactivated Polio	3/2/1990, 5/7/1990, 2/1/1991
Diphtheria, tetanus, & acellular pertussis (DTaP)	3/2/1990, 5/7/1990, 7/5/1990
Td booster	11/14/2000, 9/9/2010
Varicella Vaccine or had Chicken Pox	Reported chicken pox 8/1995
Rhogam	Xx/xx/20xx (28 wks gestation)

LABS

Hospital Laboratory Results

CBC					
	Today on Admission			Units	Reference Range
WBC	11			x10 ³ uL	3rd trimester: 5.6 - 16.9
RBC	4.8			x10 ⁶ uL	3rd trimester: 2.72 - 4.43
Hgb	11			g/dL	3rd trimester: 9.5 -15
HCT	33.0			%	3rd trimester: 28 - 40
MCV	82.6			fL	3rd trimester: 82.4 - 100.4
MCH	30			pg	3rd trimester: 25-32
MCHC	32			g/L	3rd trimester: 319-355
RDW	12.3			%	3rd trimester: 11.4- 16.6
Platelet	355			x10 ⁹ uL	3rd trimester: 146 - 429
MPV	9.0			fl	3rd trimester: 8.2-10.4

Neutro	6.2			X 10 ³	3 rd trimester: 3.9-13.1
Lymph	2.7			X 10 ³	3 rd trimester: 1.0-3.6
Mono	0.5			X 10 ³	3 rd trimester: 0.1 – 1.4
Eos	0.5			X 10 ³	3 rd trimester: 0-0.6
Baso	0.1			X 10 ³	3 rd trimester: 0-0.1

PRENATAL Laboratory Results

Group B Strep					
	36 week visit				Reference Range
Group B Strep	Positive				Negative

CBC					
	8 week visit	28 week visit		Units	Reference Range for Pregnant Females
WBC	5.4	6.1		x10 ³ uL	1 st trimester: 5.7 - 13.6 2 nd trimester: 5.6 - 14.8 3 rd trimester: 5.6 - 16.9
RBC	4.3	4.8		x10 ⁶ uL	1 st trimester: 3.42 - 4.55 2 nd trimester: 2.81 - 4.49 3 rd trimester: 2.72 - 4.43
Hgb	11.4	12.7		g/dL	1 st trimester: 11.6 - 13.9 2 nd trimester: 9.7 - 14.8 3 rd trimester: 9.5 -15
HCT	34	33		%	1 st trimester: 31 – 41 2 nd trimester: 30 – 39 3 rd trimester: 28 - 40
MCV	79.3	80.1		fL	1 st trimester: 85 -97.8 2 nd trimester: 85.8 - 99.4 3 rd trimester: 82.4 - 100.4
Platelet	234	242		x10 ⁹ uL	1 st trimester: 174 – 391

					2nd trimester: 155 – 409 3rd trimester: 146 - 429
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Glucose Tests

		28 week visit		Units	Normal Reference Range
GCT	1 hour	144		mg/dl	< 140
GTT	fasting	90		mg/dl	< 95
	1 hour	160		mg/dl	<180
	2 hour	110		mg/dl	< 155
	3 hour	100		mg/dl	< 140

Prenatal Panel

	8 week visit	28 week visit			Normal Reference Range
ABO Group	A				A,B, AB, O
Rh Typing	neg				Pos or Neg
Rh Antibody screen	neg	neg			neg
HBsAg (Hepatitis B)	neg				neg
HIV	neg				neg
HSV 1 &2 by PCR	pos				neg
RPR	neg				neg
Rubella	immune				immune
PAP	normal				normal
Chlamydia	neg				neg

Gonorrhea	neg				neg
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Urine					
	8 wks				Reference Range
Urine culture	No growth				No growth
Urine pregnancy	Positive				

DIAGNOSTICS

Ultrasound Report #1

DESCRIPTION: First trimester ultrasound for dates. EDC by LMP: xx/xx/20xx.

DISCUSSION:

Vaginal scan carried out with consent. Chaperone declined.
 Intrauterine pregnancy.
 Single live embryo. CRL = 18mm.
 Gestational age = 8 weeks + 3 days.
 USEDD = XX.YY.20ZZ

Ultrasound Report #2

DESCRIPTION: Second trimester ultrasound at 20 weeks gestation by LMP

DISCUSSION:

Single live pregnancy.
 HC = 130mm
 AC = 105mm
 FL = 22mm
 Anterior placenta, not low.
 Gestational age, based on dating parameters of HC and FL = 20 weeks and 4 days.
 USEDD = XX.YY.20ZZ

Measurement notes: crown rump length (CRL), femur length (FL), head circumference (HC), abdominal circumference (AC), and humerus length (HL)

PATIENT EDUCATION

Students may use the “Helping Patient During Labor” and “Cesarean Section” handouts available under this tab to provide patient education. Printable versions of these handouts are also available in Appendix A and B.

INFORMED CONSENT

The previously signed informed consent for an epidural is located here, as well as the unsigned consent for the Cesarean section

LEVEL

Level 1 is displayed here.

SCANNER

Use this tab to scan QR codes

EXIT

The iPad displays the message, “Are you sure you want to exit? All data will be lost?”

- If “No,” the iPad returns to the home screen.
- If “Yes,” the iPad will exit and allow users to take the included survey.

STATE 1

PREPARATION FOR EMERGENT C-SECTION

- Patient Overview
 - Students should prioritize and implement Cesarean section pre-op order set in a timely manner, while also providing therapeutic communication to the patient and her husband.
- Expected Student Behaviors
 - Provide appropriate hand hygiene throughout scenario
 - Introduce themselves to the patient and husband
 - Verify patient identity with name and date of birth. Scan **QR code: Patient ID**
 - Accurately prioritize and implement Cesarean Pre-Op Orders and Pre-Op Checklist
 - Review and interpret Fetal Monitoring Category 3 tracings
 - Educate patient and spouse what to anticipate during Cesarean section
 - Verify informed consent and when find not signed, implement appropriate action
 - Use therapeutic communication to address patient's and spouse's concerns
- Technician Prompts
 - Patient has an epidural so is barely feeling the contractions that are occurring every 3 minutes lasting 60 seconds. She is becoming anxious about the emergent cesarean section and the welfare of her baby. The facilitator can direct the level of anxiety desired.
 - “Why do I have to have a C-section?”
 - “Is my baby OK?”
 - “What does it mean when the baby's heart rate drops like that on the fetal monitor?”
 - “I heard the other nurse say there was a meconium stain. What does that mean?”

- “Are they going to put me to sleep for the C-section?”
 - “Can my husband go with me into surgery?”
 - “Will I be able to see that baby right away?”
 - “Is this going to hurt?”
 - “I’m so scared.” (tearful)
- If role playing the Spouse:
 - “Is the baby OK?”
 - “Is my wife OK?”
 - “Can I go into surgery with her?”
- Suggested Facilitator Questions
 - Review the Cesarean Pre-Op Order Set with the students.
 - What are priorities of care at this point?
 - Is there any lab work should be ordered at this time? If yes, why is this needed?
 - The patient is receiving an epidural right now. How will this change during surgery?
 - Why is the patient receiving Lactated Ringers IV? Cefazolin?
 - Why might the patient require oxytocin after surgery? How will this be determined?
 - Review the components of preparing the patient for transfer to the OR (see the Pre-Op checklist)
 - Has the informed consent been signed yet? If it has not been signed then what is the RN’s responsibility?
 - Why are sequential compression devices ordered?
- Scan the **QR Code: Category 3 Fetal Monitoring** and review the tracing.
 - What is occurring to the baby’s heart rate when the patient has a contraction? Why is this occurring?
 - What nursing interventions can be implemented for late decelerations?
- Tabbed iPad changes

EXIT

- When student has performed expected behaviors, scan the **QR Code: Facilitator**, indicating the patient is now in the surgery suite. A message will appear “The Cesarean birth can be viewed by tapping the simulation tab.” At that point, the Simulation tab can be tapped to view a video of a Cesarean section. Otherwise, the student may exit at this time.
- Students may then tap on Exit and view the message, “Scenario objectives have been met. Are you sure you want to exit the game? Yes/No.”

DEBRIEF

Nothing needed from the iPad.

QUESTIONS

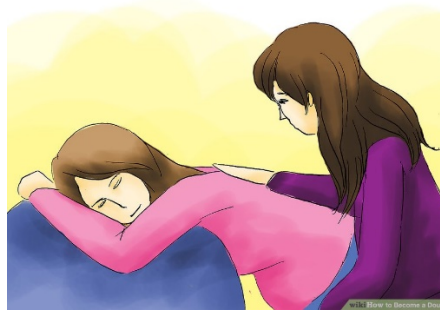
1. How did you feel this scenario went?
2. Review the learning objective: Maintain a safe, effective health care environment for an emergent Cesarean section labor patient
 - a. Summarize how you provided safe, effective care to a labor patient requiring emergency Cesarean section.
3. Review the learning objective: Differentiate between reassuring and non-reassuring fetal heart rate patterns and Identify appropriate nursing actions when non-reassuring fetal heart rate patterns are observed
 - a. Facilitator may re-enter the scenario and scan **QR Codes: Category 3 fetal monitoring**
 - b. Outline what is occurring to the fetal heart beat with each contraction in each Category
 - c. What are potential causes of these changes in fetal heart tones?
 - d. What actions can a nurse take when these types of fetal heart tones are observed, in addition to notifying the provider?
4. Review the learning objective: Implement pre-op Cesarean section orders
 - a. Do you have any questions about these orders?
 - b. What is the rationale for each order?
 - c. How did you prioritize these orders?
 - d. If you could “do over,” would you prioritize differently?
 - e. What additional independent nursing interventions did you provide during labor? Were they effective?
 - f. If you could “do over,” would you do anything differently?
5. Review the learning objective: Utilize therapeutic communication with the patient and family member before emergent surgery
 - a. How did you provide patient education about the Cesarean section to the patient and spouse while also utilizing therapeutic communication?

- b. Was it effective?
 - c. If you could “do over,” would you change your approach in any way?
6. Tie this scenario to the nursing process:
- a. a. Identify 3 priority nursing problems you identified.
 - b. b. Create a patient centered goal for each nursing problem you identified.
 - c. c. Describe focused assessments for each nursing problem.
 - d. d. Discuss nursing interventions for each nursing diagnosis.
 - e. e. Re-evaluate the simulation in terms of the nursing process; what was actually accomplished? What could be improved in the future?
7. Summarize/Take away Points: “In this scenario you care for a patient in labor experiencing non-reassuring fetal heart tones that required an emergent Cesarean section. What is one thing you learned from participating in this scenario that you will take into your nursing practice?” (Ask each student to share something unique from what the other students share.)

NOTE: Debriefing technique is based on INASCL Standard for Debriefing and NLN Theory-Based Debriefing by Dreifuerst.

APPENDIX A: HELPING DURING LABOR PATIENT EDUCATION HANDOUT

HELPING DURING LABOR AND AFTER THE BIRTH OF A BABY



BE CALM

This is the best thing you can do. If you are calm, this will help your partner remain calm.



BE YOUR PARTNER'S ADVOCATE

This is your main job. Talk with the nurse and ask questions if you are unclear about anything. Your nurse is your advocate too and is there to assist you. Assisting with contractions by timing them and assisting the laboring woman to be relaxed between contractions. Giving her ice chips, holding her hand or giving her a cool pack in between contractions can help. Tell her what a great job she is doing.

The Acronym **SUPPORT** can assist.

This will make it easy to recall all the things you can do to help your wife. Each of these can make a big difference in her comfort levels and the over-all positivity of the birthing experience. Take the time to memorize these helpful points.

- S – Support emotionally. Giving positive emotional support is crucial during labor. Listen actively, validate her emotions, ask questions, and reassure your wife to help her feel more comfortable.
- U – Urination, at least once an hour. Remind her to go to the bathroom. This will get her moving, which can aid during these stages.
- P – Position changes, often.
- P – Praise and encouragement, not sympathy, is needed to help her get through this.
- O – Out of bed (walk/shower) is better than laying down.
- R – Relaxation is key.
- T – Touch: pressure and massage.

HELPING AFTER LABOR



Be attentive to her mood. Both baby blues and postpartum depression are very real. Baby-blues are fairly normal, but be careful for signs of postpartum depression. These can be signals of a serious problem that may require professional help.

- Signs of baby blues:
- Mood swings
- Anxiety
- Sadness
- Irritability

- Feeling overwhelmed
- Crying
- Reduced concentration
- Appetite problems
- Trouble sleeping
- Signs of postpartum depression:
 - Depression or severe mood swings
 - Excessive crying
 - Difficulty bonding with the baby
 - Withdrawing from family and friends
 - Loss of appetite or sudden, excessive eating
 - Insomnia or hypersomnia (lack of sleep or excessive sleep)
 - Overwhelming fatigue
 - Intense irritability and anger
 - Feelings of worthlessness, shame, guilt or inadequacy
 - Diminished ability to think clearly, concentrate or make decision



CELEBRATE, TOGETHER

You may want to have everyone you know over to see the baby. Just make sure that you're not over-doing it. A new baby is stressful enough, without all the added chaos from celebrations. Clean up. Shoo people home before it gets too late. A 10-minute visit is great plenty. Visitors that do laundry, vacuum, grocery shop and make meals for you can stay for a longer visit.



GO TEAM

Parenting is a team activity. Make sure you do your part, but don't go overboard. By becoming an equal partner in your relationship, you can make the time after labor more positive. Especially in the first few weeks after the birth, a new mom may need a lot of time to recover. She may need frequent naps, be sore, and generally fatigued. You will be tired too. Enlist the help of family and friends with offers to help in the first few weeks and beyond if needed.

- Try to be as involved with the baby as possible. The mother shouldn't be the only one getting up with the baby all night – support person's need to assist



Treat her well, but make sure you take care of yourself, too. Partners sometimes have such a strong need to help out, they forget to take care of themselves. Make sure you are rested and content, so that you can be there for your wife. Don't burn yourself out.

Images from [wikihow.com](http://www.wikihow.com) and content adapted from: Widarsson, M., Kerstis, B., Sundquist, K., Engström, G., & Sarkadi, A. (2012). Support Needs of Expectant Mothers and Fathers: A Qualitative Study. *The Journal of Perinatal Education*, 21(1), 36–44. <http://doi.org/10.1891/1058-1243.21.1.36>

APPENDIX B: CESAREAN SECTION PATIENT EDUCATION HANDOUT

CESAREAN SECTION



A Cesarean section, or C-section, is a procedure during which a baby is surgically delivered. This procedure is carried out when a vaginal birth isn't possible, when vaginal birth will put the mother's or baby's life at risk, if the mother has delivered previous children by C-section. If you are planning for a scheduled C-section or want to prepare yourself in the event an emergency C-section is necessary, you should be aware of the details of the procedure, get the necessary testing done, and create a hospital plan with your doctor.



UNDERSTAND WHY A PLANNED C-SECTION IS PERFORMED

Depending on your pregnancy, your doctor may recommend a C-section due to a medical issue that may affect the health of your baby. A C-section may be recommended if you are having complications related to the following medical conditions like heart disease, diabetes, high blood pressure, or kidney disease.

- You have an infection like HIV or active genital herpes.

- Your baby's health is at risk due to an illness or a congenital condition. If your baby is too large to move safely through the birth canal, your doctor may advise a C-section.
- Your baby is in the breech position, where she is feet-first or butt-first and cannot be turned.
- You have had a C-section during a previous pregnancy.

You will usually have time to ask questions about the procedure even if the decision for the cesarean birth occurs during your labor.

UNDERSTANDING THE PROCEDURE



The procedure will be performed by your doctor. An outline of the procedure should be presented so you can mentally prepare for it. In general, most C-sections follow the same steps.

- At the hospital, the staff will clean your abdominal area and insert a catheter into your bladder to collect any urine. You will get an IV in your arm so you can get fluid and medication before and during the procedure.
- Most C-sections are done with regional anesthesia that numbs only the lower part of your body. This will mean you are awake during the procedure and will have a chance to see your baby being taken out of the womb. The anesthesia will most likely be given through a spinal block, where the medication is injected into an area surrounding your spinal cord. If you need a C-section due to an emergency during labor, you may be given general anesthesia, and you will be completely asleep during the birth.
- Your doctor will make a horizontal incision through your abdominal wall, close to your pubic hairline. If your baby needs to be delivered fast due to a medical emergency, your doctor will make a vertical incision from just below your navel to right above your pubic bone.

- Your doctor will then make the uterine incision. About 95 percent of C-sections occur with a horizontal incision across the lower part of your uterus, as the muscle at the bottom your uterus is thinner, leading to less bleeding during the procedure.
- Your baby will then be delivered by being lifted out of the incision made to your uterus. Your doctor will use suction to clear your baby's mouth and nose of amniotic fluid and then clamp and cut the umbilical cord. You may experience a tugging feeling as the doctor lifts your baby up and out of your uterus.
- Your doctor will remove the placenta from your uterus, check to confirm your reproductive organs are healthy, and close the incisions with sutures. You can then meet your new baby by touching or holding the baby skin to skin. Skin to skin is an excellent way for both you and your baby to transition.



KEEP IN MIND THE RISKS ASSOCIATED WITH THE PROCEDURE

The American Congress of Obstetricians and Gynecologists (ACOG) recommends that mothers and their doctors plan for a vaginal delivery unless a C-section is medically necessary. Choosing a planned C-section should be done only after you have had a serious discussion with your doctor about the procedure and understand the possible risks of the procedure.

- A C-section is considered major surgery and you will likely lose more blood during a C-section than in vaginal birth. The recovery time is also longer for C-sections, about two to three days in the hospital. It is a major abdominal surgery and full healing will take six weeks. Once you have one cesarean there may be a risk in future pregnancies. Your health care provider can assist you with the decision of future deliveries and whether the next birth would need to be another cesarean birth or if you could have a vaginal birth after a cesarean birth.

- There are risks associated with the surgery itself, as you will need to be under regional anesthesia, which can lead to an adverse reaction to the anesthesia. You are at a higher risk of developing blood clots in the veins of your legs or your pelvic organs due to a C-section, and it is possible the wound from the incision could become infected.
- A C-section could lead to medical issues for your baby, including breathing issues like transient tachypnea, where your baby breathes abnormally fast during the first few days of birth. As well, C-sections done too early, sooner than 39 weeks of pregnancy, can increase your baby's risk of breathing problems. Your baby is also at risk for a surgical injury, where your doctor accidentally nicks your baby's skin during the surgery.

RECEIVE THE NECESSARY MEDICAL TESTING

Your doctor will likely recommend certain blood tests to prepare you for your C-section. These tests will give your doctor important information, such as your blood type and your hemoglobin level, that she may use in the event you need a blood transfusion during the surgery

- You should also tell your doctor if you are on any medication, in the event your medication could complicate the surgery.
- Your doctor will recommend that you talk with an anesthesiologist to rule out any medical conditions that may increase your risk of complications while under anesthesia.

DECIDE WHO WILL BE IN THE ROOM DURING THE SURGERY

During your planning for your C-section, discuss with your partner about what to expect before, after, and during the surgery. Specify if your spouse or support person will be present for the delivery and if he or she will stay with you and your baby after the surgery.

- Many hospitals allow the support person to sit next to you during the surgery and take pictures of the birth. Your doctor should allow at least one support person to be in the room with you during the delivery.

KNOW WHAT TO EXPECT THE NIGHT BEFORE THE SURGERY IF YOU HAVE A PLANNED CESAREAN

Your doctor should discuss the protocol for the night before surgery, as you there may be eating, drinking, and smoking restrictions prior to your cesarean birth.

- Get a good night's sleep before the surgery. Take a shower before going to the hospital, but do not shave your pubic hair as this can increase your chances of an

infection. The nursing staff may shave your abdominal area and/or your pubic hair at the hospital, if necessary.

- If you have an iron deficiency, your doctor may recommend that you increase your iron intake through iron rich foods and supplements. As a C-section is considered major surgery, you will lose blood and having high levels of iron will help your body recover.
- Your doctor will recommend the best time for you to schedule your C-birth, based on your medical needs and the medical needs of your baby. Some mothers schedule their C-birth at 39 weeks, based on their doctor's recommendation. If you are having a healthy pregnancy, your doctor will likely suggest a date closer to your due date.

AFTER THE BIRTH

Plan to stay and recover in the hospital for at least two to three days. As the anesthesia wears off, you may be given a pump that allows you to adjust the dose of the pain medication via your IV. Your doctor will encourage you to get up and walk around soon after your C-section, as this can speed up your recovery and help prevent constipation and blood clots.

- The nursing staff will also monitor your incision from the C-section for signs of an infection as well as how much fluid you're drinking and how your bladder and bowels are functioning. Your nurse will assist you with breastfeeding in the recovery room, as skin-to-skin contact and breastfeeding are important bonding moments between you and your baby.

Ask your doctor about pain medication and home care. Before you leave the hospital, your doctor should outline any pain medications you can take and any preventative care you might need, such as vaccinations. Your vaccinations should be up to date to protect the health of you and your baby.^[17]



- Keep in mind if you are breastfeeding, to ask your health care provider what medications that are safe for you and your baby.
- Your health care provider will explain the "involution" process in your uterus, where your uterus shrinks back to its pre-pregnancy size, called lochia. You will have some bleeding for up to 3-6 weeks. First red in color, then pink and finally a whitish discharge. You will need to wear absorbent menstrual pads, often provided by the hospital after delivery and do not wear tampons as you recover.

Take care of yourself and your baby as you heal at home. It can take one to two months to recover from a cesarean birth so take it slow at home and limit your physical activity level. Avoid lifting anything heavier than your baby and do not do any housework.

- Use your lochia bleeding to gauge your activity level, it will increase if you are doing too much activity. Over time the bleeding will change from pale pink or dark red to yellowish or light in color. Do not use tampons or douche until your lochia bleeding stops. Do not have sexual intercourse until your doctor says it is safe to do so.
- Stay hydrated by drinking lots of water and eating a healthy, balanced diet. This will help your body heal and prevent gas and constipation. You should keep the changing station and the feeding supplies for your baby close to you so you do not have to get up often.
- Be on alert for a high fever or any abdominal pain, as these can both be signs of an infection. If you start to experience these symptoms, contact your health care provider.

ASK YOUR NURSE

If you have further questions your nurse can assist you in clarifying information on the topic of cesarean birth.

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CREDITS

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