

N432 Labor & Delivery Care Plan

Lakeview College of Nursing

Anthony Morgan

Demographics (5 points)

Date & Time of Admission 2/21/22	Patient Initials B.P.	Age 18	Gender Female
Race/Ethnicity Caucasian	Occupation N/A	Marital Status Unmarried	Allergies None
Code Status DNR	Height 165cm	Weight 68kg	Father of Baby Involved Yes

Medical History (10 Points)**Prenatal History:**

- The patient is a gravida G1P0 making this her first pregnancy.
- Positive for group beta strep test
- A CBC was drawn, and it is within normal limits
- Vitals
 - Pulse 60
 - Blood pressure 110/68
 - Respiratory rate 18
 - Temperature 98.6F
 - Oxygen saturation 100%
- Estimated due date is 3/7/22

Past Medical History: None**Past Surgical History:** None**Family History:** None provided**Social History (tobacco/alcohol/drugs):**

- Half a pack of cigarettes each week

- No drugs
- No alcohol

Living Situation: Lives with her Mother

Education Level: High school diploma

Admission Assessment

Chief Complaint (4 points): Labor

Presentation to Labor & Delivery (15 points):

The patient sought care at the hospital because their water broke this morning, and she stated that she thinks she is in labor. Abdominal pain and nausea occurred after her water broke and have been continuous since admission to the hospital. Brenda describes her pain as two on a 0-10 scale, with 0 being no pain and 10 being the worse pain imaginable. Brenda has not attempted interventions. The utilization of positive therapeutic communication somewhat alleviates her pain. Speaking to her in a supportive, confident, and calm voice helps. Treatment does not involve her pain.

Diagnosis

Primary Diagnosis on Admission (4 points): Rupture of membranes

Secondary Diagnosis (if applicable): Group beta strep (GBS)

Stage of Labor

Stage of Labor Write Up, APA format (40 points) This should include the progression of cervical effacement & dilation as well as pain management techniques:

Stage of Labor References (2 required) (APA):

The Mother's baby is monitored using fetal heart rate monitoring (FHR) during labor. The monitor has two sections, the top has the baby's heart rate, and the bottom has the Mother's contractions. This tool tells providers to know if the baby is doing okay. Accelerations on the

monitor tell providers that a baby is doing fine. Brenda's fetus has a baseline heart rate of 145 with accelerations. "FHR accelerates at least 15/min (10/min prior to 32 weeks) for at least 15 seconds (10 seconds prior to 32 weeks) and occurs two or more times during a 20-min period" (Barlow et al, 2019, p. 33). Sometimes the FHR is not perfect. A phenomenon on the FHR known as a deceleration occurs when the baby is under stress due to a change in the uterus. An early deceleration occurs when a baby's head is compressed (Barlow et al, 2019). A late deceleration occurs when the placenta is not giving the baby oxygen and nutrients (Barlow et al, 2019). Variable accelerations occur when the umbilical cord is compressed (Barlow et al, 2019). Brenda was fortunate enough not to have decelerations on the FHR. The bottom screen showed that her contractions were 50 – 65 seconds long, occurring every 2.5 – 3minutes.

When Brenda came to the emergency room (ER), she was diagnosed with a rupture of membranes. A vaginal exam revealed 50% effacement and 4cm dilation of the cervix. Her baby was at -2 station. The patient was in the first stage of labor within the active phase. Contractions in this stage are 2-5minutes and last for 45-60 seconds (Ricci et al, 2022). Brenda's FHR is nearly consistent with the active stage. Before the active phase, there is a latent phase. The latent phase is characterized by 0-40% effacement and 0-6cm dilation of the cervix (Ricci et al, 2022). Contractions occur every 5-10 minutes with mild intensity lasting 30 – 45 seconds. Brenda still has three more stages of labor.

The cervix is dilated by 10cm in the second stage and involves the pelvic and perineal phases (Ricci et al, 2022). The pelvic phase is characterized by fetal descent, and the Mother is pushing during the perineal phase. Unlike the phases in the first stage of labor, the phases in the second stage coincide. The second stage of labor is also characterized by contractions that last for 60 – 90 seconds, occurring every 2-3 minutes, with the entire stage lasting as long as three

hours. In this stage, the Mother's partner is there for emotional support because pushing is difficult and painful. Nurses give mothers medication to decrease the pain.

In the third stage, the placenta has to be delivered, lasting on average 5-10 minutes but can last up to 30minutes (Ricci et al, 2022). During the fourth stage, the Mother is recovering from the experience. Nurses may give small snacks. The nurse might also draw a complete blood count in this stage.

References:

Ricci, S. S., Kyle, T., & Carman, S. (2022). *Maternity and pediatric nursing* (4th ed.). Wolters Kluwer.

Barlow, M., Holman, H., Johnson, J., McMichael, M, Sommer, S., Wheless, L.,

Wilford, K., & Williams, D. (2019). *ATI: RN Maternal newborn nursing* (11th ed.). Assessment Technologies Institute, LLC.

Laboratory Data (15 points)

CBC Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Prenatal Value	Admission Value	Today's Value	Reason for Abnormal Value
RBC	3.80 – 5.30	4.6	4	4	
Hgb	12-15.8	14	13	13	
Hct	36-47%	40	36	36	
Platelets	140-440	350	200	200	
WBC	4-12	8	11	11	
Neutrophils	1.60-7.70	N/A	N/A	N/A	
Lymphocytes	1.3-3.20	N/A	N/A	N/A	
Monocytes	0.20-1.00	N/A	N/A	N/A	
Eosinophils	0.00-0.40	N/A	N/A	N/A	

Bands	N/A	N/A	N/A	N/A	
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Other Tests **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Prenatal Value	Value on Admission	Today's Value	Reason for Abnormal
Blood Type	A, A, B, B, AB, AB, O, O	N/A	O	O	
Rh Factor	Negative - Positive	N/A	Positive	Positive	
Serology (RPR/VDRL)	Nonreactive – reactive	N/A	Negative	Negative	
Rubella Titer	5-9 (equivocal) 9< immune	N/A	Immune	Immune	
HIV	Nonreactive – reactive	N/A	Nonreactive	Nonreactive	
HbSAG	Not detected – detected	N/A	Not detected	Not detected	
Group Beta Strep Swab	Negative – positive	Positive	Positive	Positive	The patient is positive because the bacteria are normally found in humans. Streptococcus type B is an opportunistic species that will grow when the surrounding environment is more habitable (Mayo Clinic, 2021).
Glucose at 28 Weeks	<140	120	N/A	N/A	
MSAFP (If Applicable)	N/A	N/A	N/A	N/A	

Additional Admission labs **Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.**

Lab Test	Normal Range	Prenatal Value	Value on Admission	Today's Value	Reason for Abnormal
Gonorrhea/Chlamydia	Negative-positive	N/A	Negative	Negative	
Urinalysis					A urinalysis tests for glucose, protein, ketones, pH, specific gravity, and visibility (Carle Foundation Hospital, 2021). All portions of the test were either negative or within normal limits.
Glucose	Negative - positive	N/A	Negative	Negative	
Protein	Negative - positive	N/A	Negative	Negative	
Ketones	Negative - positive	N/A	Negative	Negative	

Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	Normal Range	Prenatal Value	Value on Admission	Today's Value	Explanation of Findings
Urine protein/creatinine ratio (if applicable)	Negative-positive	N/A	Negative	Negative	

Lab Reference (1) (APA):

Carle Foundation Hospital. (2021). *Lab Test Catalog*. <http://www.carle.com/LabCatalogOnline/>

**Current Medications (7 points, 1 point per completed med)
*7 different medications must be completed***

Home Medications (2 required)

Brand/Generic	Generic:	Generic:			
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	prenatal vitamin chewable tablet Brand: NataChew, Select-OB	docusate sodium Brand: Prenatal colace			
Dose	1mg	35mg			
Frequency	Daily	Every 12 hours PRN			
Route	Oral	Oral			
Classification	Iron products Vitamin and mineral combinations	Surfactant Laxative, stool softener			
Mechanism of Action	Helps the fetus and mother to remain healthy. Helps the fetus grow as well.	Decreases the surface tension between oil and water in stool allowing more fluid to be absorbed by feces.			
Reason Client Taking	Fetal development	Constipation			
Contraindications (2)	High iron	Use of this drug for more than seven days Intestinal obstruction			
Side Effects/Adverse Reactions (2)	Constipation Diarrhea	Nausea Vomiting			
Nursing Considerations (2)	Shield the supplements from heat and	Do not give this drug to a patient with			

	<p>light (drugs.com, 2021).</p> <p>Giving with too much food can cause poor absorption of the prenatal vitamin (drugs.com, 2021). The supplement and the food compete for the same enzymes causing slow absorption rate.</p>	<p>abdominal pain.</p> <p>Long term use of this drug will cause a patient to depend on it to have bowel movements.</p>			
<p>Key Nursing Assessment(s)/Lab(s) Prior to Administration</p>	<p>The nurse should check for signs of shortness of breath and itching. An iron level should be drawn prior to administration. The prenatal drug is an iron product.</p>	<p>Get a baseline for bowel sounds as well as electrolytes. Assess for laxative abuse (Barlett et al, 2019). Laxative abuse can cause constipation.</p>			
<p>Client Teaching needs (2)</p>	<p>Tell the patient to watch out for signs of allergy such as rash, hives, and itching.</p> <p>Inform the patient that dairy</p>	<p>Instruct patients to take with a full glass of water or milk.</p> <p>Ask patients to increase exercise.</p>			

	interferes with the absorption of this supplement (drugs.com, 2021).				
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Hospital Medications (5 required)

Brand/Generic	Generic: ondansetron Brand: Zofran	Generic: penicillin Brand: Pfizerpen	Generic: promethazine Brand: Promethegan	Generic: oxytocin Brand: Uterotonic agents	Generic: calcium carbonate Brand: Tums
Dose	4mg	5million units	12.5mg	3mL	1000mg
Frequency	6hrs PRN	4hrs	4hrs PRN	Once per hour	8hrs PRN
Route	Intravenous	Intravenous	Intravenous	Intravenous	Oral
Classification	Selective serotonin (5-HT3) receptor antagonist Antiemetic	Penicillin Antibiotic	Phenothiazine Antiemetic	Pituitary Hormone, posterior Oxytocic hormones	Calcium salt Antacid
Mechanism of Action	The portion of vagal nerve that travels through the abdomen is suppressed by blocking its serotonin receptors preventing	Penicillin degrades the structural integrity of peptidoglycan network within bacterial cell walls. The destruction of the cell	This drug reduces histamine effects during allergic reactions by blocking H1-receptors. It also blocks receptors in	Oxytocin forces the uterus to contract and push the baby further down. Teach the patient to recognize	Intra and extracellular levels of calcium are increased.

	nausea and vomiting.	wall causes prokaryotes to die.	the medulla oblongata and inner ear to decrease motion sickness and dizziness (Barlett et al, 2019).	signs of hypersensitivity.	
Reason Client Taking	Nausea	GBS infection	Nausea and vomiting	Labor	Heartburn
Contraindications (2)	Administration of ondansetron and apomorphine at the same time. Allergy to ondansetron and its components .	Hypersensitivity to penicillin Breastfeeding is contraindicated because penicillin is present within breastmilk after administration (Barlett et al, 2019). Penicillin can elevate liver enzymes which is indicative of hepatic injury (Barlett et al, 2019).	Intra-arterial subcutaneous Hypersensitivity to promethazine and its related subunits.	Concurrent use with epinephrine is contraindicated because the combination of oxytocin and epinephrine can significantly rise blood pressure (drugs.com, 2021). The combination of ondansetron and oxytocin is contraindicated because their combination can induce an irregular heart rhythm (Drugs.com, 2021).	Ventricular fibrillation Hypocalcemia
Side Effects/Adverse	Hypotension	Electrolyte imbalance	Hyperglycemia	Hypotension	Irregular heartbeat

Reactions (2)	Stridor	Vaginal candidiasis	Respiratory depression	Vaginal bleeding	Nausea and vomiting
Nursing Considerations (2)	Use calibrated containers and oral syringes to measure oral medicine (Barlett et al, 2019). The drug is administered diluted before surgery and undiluted after surgery	Intramuscular injection would cause slow absorption making an allergic reaction difficult to treat (Barlett et al, 2019). Reconstitute with either D5W, sodium chloride, or sterile water (Barlett et al, 2019).	Intra-arterial injection can cause arteriospasm s. IV injection is given no more than 25mg/min.	Oxytocin should be used more conservatively in patients sensitive to uterine effects (Drugs.com, 2021). If oxytocin induces contraction that are too strong, the uterus could tear, and the baby could receive less oxygen (Drugs.com, 2021).	Warm solution to room temperature before administration (Barlett et al, 2019). Check frequently for skin necrosis because calcium can cause death (Barlett et al, 2019).
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Have a magnesium and potassium level drawn; otherwise, administration can lead to ventricular fibrillation when levels are low (Barlett et al, 2019).	Order a culture and sensitivity test before administration. Assess for secondary infection due to death of normal flora (Barlett et al, 2019).	Assess for signs of neuroleptic malignant syndrome.	Assess for high blood pressure and bleeding. Administering oxytocin to a patient with hypertension could exacerbate it. Bleeding patients could experience a subarachnoid hemorrhage (Drugs.com, 2021).	Have serum calcium and phosphorus levels drawn before administration.
Client Teaching	Instruct	Report any	Tell the	Teach patient	Instruct

<p>needs (2)</p>	<p>patients to report signs of rash and shortness of breath immediately (Barlett et al, 2019).</p> <p>Use calibrated containers and oral syringes to measure oral medicine (Barlett et al, 2019).</p>	<p>previous allergies and adverse reactions to penicillin immediately (Barlett et al, 2019).</p> <p>The patient must report diarrhea even if it occurs two months after penicillin administration (Barlett et al, 2019).</p>	<p>patient to avoid prolonged sun exposure and utilize sunscreen</p> <p>Ask the patient to use a calibrated device to achieve accurate measurements (Barlett et al, 2019).</p>	<p>how to recognize signs of overdose such as restlessness and shakiness (Drugs.com, 2021).</p>	<p>patient to chew thoroughly followed by a glass of water (Barlett et al, 2019).</p> <p>Avoid taking calcium within two hours of another oral drug (Barlett et al, 2019).</p>
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Medications Reference (1 required) (APA):

Drugs.com. (2021). *Drug interactions between adrenalin and oxytocin.*

<https://www.drugs.com/drug-interactions/adrenalin-with-oxytocin-989-4184-1777-0.html>

Drugs.com. (2021). *Drug interactions between oxytocin and zofran.*

<https://www.drugs.com/drug-interactions/oxytocin-with-zofran-1777-0-1752-1120.html>

Drugs.com. (2021). *Multivitamin, prenatal dosage.* <https://www.drugs.com/dosage/multivitamin-prenatal.html>

Drugs.com. (2021). *Oxytocin.* <https://www.drugs.com/cons/oxytocin-intravenous-intramuscular.html>

Drugs.com. (2021). *Prenatal vitamin chewable tablet.* <https://www.drugs.com/cdi/prenatal-vitamin-chewable-tablet.html>

Taylor, C., Lynn, P., & Bartlett, J. L. (2019). *Fundamentals of nursing: The art and science of person-centered care* (9th ed.). Wolters Kluwer

Vital Signs, 3 sets (10 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
Prenatal	60	110/68	18	98.6F	100%
Admission to Labor/Delivery	98	120/72	20	99F	98%
During your care	91	118/70	19	99F	98%

Vital Sign Trends and pertinence to client’s condition in labor:

The patient’s overall vitals rose from the prenatal period to admission but decrease during care.

The patient sought care because their water broke which likely made them emotionally and increase their vital signs.

Pain Assessment, 2 sets (10 points)

Time	Scale	Location	Severity	Characteristics	Interventions

10:25	0-10	Abdomen	2	Sharp	Therapeutic communication
11:00	0-10	Everywhere	2	Sharp	Therapeutic communication

IV Assessment (10 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
<p>Size of IV: 20 Location of IV: Left forearm Date on IV: 2/21/22 Patency of IV: Clear Signs of erythema, drainage, etc.: None IV dressing assessment: Dry and intact</p>	<p>The patient is receiving penicillin through their IV at 1.25 million units per hour.</p>

Nursing Diagnosis (30 points)

Must be NANDA approved nursing diagnosis and listed in order of priority

2 points for the correct priority

Nursing Diagnosis (2 pt each) Identify problems that are specific to this patient. Include full nursing diagnosis with “related to” and “as evidenced by” components	Rationale (1 pt each) Explain why the nursing diagnosis was chosen	Intervention/Rationale(2 per dx) (1 pt each) Interventions should be specific and individualized for this patient. Be sure to include a time interval such as “Assess vital signs q 12 hours.” List a rationale for each intervention and using APA format, cite the source for your rationale.	Evaluation (2 pts each) <ul style="list-style-type: none"> How did the patient/family respond to the nurse’s actions? Client response, status of goals and outcomes, modifications to plan.
Risk for infection related to penicillin administration as evidence by GBS infection.	The patient has a GBS that can spread to other parts of the body causing disease. Administration of penicillin can kill normal gut bacteria creating a condition known as clostridium	Administered penicillin at 1.25million units per hour. 1. The penicillin will decrease the population of GBS giving the baby a decreased likelihood of contracting GBS (Mayo Clinic, 2021). Rationale 2.Penicillin disrupts the network of peptidoglycan	The baby will likely not contract GBS due to the antibiotic killing most of the streptococcal b bacteria.

	difficile.	within bacterial cell wall causing their death (Frandsen & Pennington, 2020). Rationale	
Labor pain related to uterine contractions as evidence by cervical dilation of 4cm.	The patient expressed pain from admission to the end of the simulation.	Two pain assessments were conducted on the patient within a thirty-minute period. Brenda was asked about the severity of pain as well. 1. Doing frequent assessments makes it likely to identify problems and use early intervention (Tzeng et al, 2017). Rationale 2. Monitoring severity of pain tells providers if interventions are working and if a condition is getting worse (Hinkle, 2018). Rationale	The patient reported their pain as a two on a 0-10 pain scale.
Nausea related to pregnancy as evidence by grimacing and holding their hand over their abdomen.	The patient was nauseous during the entire admission. Nonverbal body language for abdominal discomfort includes grimacing and hold a hand over it.	Administered promethazine and Zofran to decrease nausea. 1. Both medications decrease nausea and vomiting (Bartlett et al, 2019). Rationale 2. The vagal nerve is inhibited along the digestive tract preventing nausea and vomiting sensation (Bartlett et al, 2019). Nerves along the medulla oblongata and inner ear are also inhibited decreasing nausea and vomiting (Bartlett et al, 2019). Rationale	The nausea and vomiting were nonexistent by the end of the simulation.
Stress related to	The patient's	Using therapeutic	The patient's vitals

<p>childbirth as evidence by elevated vitals during admission.</p>	<p>baseline vitals were a pulse of 60, blood pressure of 110/68, respirations of 18 and oxygen of 100%. All of those vitals were elevated during admission.</p>	<p>communication to distract the patient helped them to cope with the situation. Education was provided in a confident, friendly, and professional manner.</p> <p>1. Providing education informs the patient of the situation and gives them a sense of control. A sense of control reduces negative emotions that induce stress (Hinkle, 2018). Rationale</p> <p>2. Positive therapeutic communication makes patients feel safe and comfortable, which establishes rapport and decreases stress. (Videbeck, 2020). Rationale</p>	<p>decreased while they were in the first stage of labor. Their pulse dropped from 98 to 91, blood pressure from 120/72 to 118/70, and respiratory rate from 20 to 19. The FHR revealed no decelerations.</p>
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Other References (APA)

Frandsen, C. & Pennington, S. S. (2020). *Abrams’ clinical drug therapy: rationales for nursing practice* (12th ed.). Lippincott, Williams, Wilkins. ISBN 9781975136130

Hinkle, J.L., & Cheever, K. H. (2018). *Brunner & suddarth’s textbook of medical-surgical nursing* (14th ed.). Wolters Kluwer Health Lippincott Williams & Wilkins

Mayo Clinic. (2021). *Group b strep disease*.

<https://www.mayoclinic.org/diseases-conditions/group-b-strep/diagnosis-treatment/drc-20351735>

Mayo Clinic. (2021). *Group b strep disease*.

<https://www.mayoclinic.org/diseases-conditions/group-b-strep/symptoms-causes/syc-20351729>

Taylor, C., Lynn, P., & Bartlett, J. L. (2019). *Fundamentals of nursing: The art and science of person-centered care* (9th ed.). Wolters Kluwer

Tzeng, Ya-Ling; Yang, Ya-Ling; Kuo, Pi-Chao; Lin, Ya-Chuan; Chen, Shu-Ling. (2017). Pain, anxiety, and fatigue during labor: a prospective, repeated measures study. *The Journal of Nursing Research* 25(1), 59-61. doi: 10.1097/jnr.000000000000165

Videbeck, S.L. (2020). *Psychiatric mental health nursing* (8th ed.). Wolter Kluwer Health Lippincott Williams & Wilkins.