

N432 Labor and Delivery Concept map template

Medications				
Medication	Dose, route, frequency	Classification (Pharm. & Thera.)	Reason	Nursing assessment
Ampicillin	1g/10ml IV Q4H	T: Anti-infective P: Aminopenicillin (Vallerand & Sanoski, 2023).	Prophylactic antibiotic for group B streptococcus (BGS) positive patient	Assess patient's previous use of penicillins and cephalosporins and identify any adverse events (Vallerand & Sanoski, 2023).
Oxytocin	6 ml/hr IV Continuous	T: Hormone P: Oxytocic (Vallerand & Sanoski, 2023).	Labor induction	Assess fetal age, presentation, station, and pelvis type before medication initiation (Vallerand & Sanoski, 2023).
Fentanyl	75 mcg IV Q3H PRN	T: Opioid analgesic P: Opioid agonist (Vallerand & Sanoski, 2023).	Pain management	Assess and monitor vital signs and respiratory status before medication initiation and frequently during therapy (Vallerand & Sanoski, 2023).
Acetaminophen	325 mg PO Q3H PRN	T: Non-opioid analgesic P: None (Vallerand & Sanoski, 2023).	Pain management	Assess liver status and alcohol usage before administering medication (Vallerand & Sanoski, 2023).
Ondansetron	4 mg PO Q6H PRN	T: Anti-emetic P: 5-HT-3 antagonist (Vallerand & Sanoski, 2023).	Nausea management	Assess patient's nausea, vomiting, and bowel sounds before medication initiation and after administration (Vallerand & Sanoski, 2023).

Demographic Data

Admitting diagnosis: Uterine contractions

Secondary diagnosis: Gestational diabetes mellitus (GDM)

Age of client: 37 years old

Weight in kgs: 93.3 Kg

Allergies: No known allergies

Date of admission: 6/12/2023

Support person present: H. – father of baby

Presentation to Labor and Delivery

Patient presented to the labor and delivery department with complaints of increased uterine contractions. Patient stated the contractions had been increasing in frequency and duration for the last 12 hours. Contraction pain was localized to abdomen and lower back. Patient states contractions felt like a "cramp" and were similar to contractions from former pregnancies. Patient stated nothing makes the contractions worse, and moving around helps make them better. Patient had not yet sought treatment for contractions during this pregnancy. Upon arrival to the unit, the patient was dilated to 4 cm and admitted for possible induction.

Electronic Fetal Heart Monitoring: (At the beginning and the end of shift.)

Baseline EFH:
Beginning: 145 bpm End: 140 bpm

Variability:
Beginning: Moderate End: Moderate

Accelerations:
Beginning: Present End: Present

Decelerations:
Beginning: Absent End: Absent

Contractions:

-frequency
Beginning: 6 minutes End: 2-3 minutes

-length
Beginning: 1.5 minutes End: 1 minute

-strength
Beginning: Moderate End: Strong

-patient's response
Beginning: 7/10 pain, handling well
End: 0/10 pain, patient states epidural made contractions feel like minor pressure.

Stages of Labor

Stage 1

According to Ricci et al. (2021), the first stage of labor is the longest and ends with full cervical dilation of 10 cm. Common signs and symptoms of the first stage include irregular contractions that gradually become regular and more intense, bloody show, and a change in vaginal discharge.

Prenatal & Current Lab Values/Diagnostics

Blood type: A; Rh: positive	Antibody: negative
GBS: positive	ADEX ABX: yes
3 rd trimester HIV: negative	Date: 6/13/2023
Hepatitis B: nonreactive	Rubella: immune
RPR: nonreactive	UDS: yes
TDaP: immune	Flu: immune

White blood cells: 12.2 (normal: 4.0-12.0 x10³/μl)
According to Van Leeuwen and Bladh (2021), pregnancy, especially third trimester pregnancies, cause a minimal increase to white blood cell count due to increased neutrophils around the third trimester and labor - levels typically return to normal around a week postpartum.

Group B streptococcus: Positive (normal: negative)
According to the Cleveland Clinic (2022), group B streptococcus (GBS) is present in approximately 25% of pregnant women and causes no symptoms. A positive GBS test indicates the bacteria is present in the mother and increases the risk of the baby developing complications from a transferred GBS infection (Cleveland Clinic, 2022).

Medical History

Prenatal History: GDM (2023; 2021; 2013); postpartum hemorrhage (2021); trichomoniasis (2019); spontaneous abortion (2015)

Previous Medical History: COVID-19 (2022)

Surgical History: Spontaneous abortion with dilatation and curettage (2015); appendectomy (2011)

Family History: N/A

Social History: Patient is a former ¼ pack/day cigarette smoker for 5 years. Patient states they quit smoking in 2021 with their last pregnancy. Patient does not use alcohol or other drugs.

ends with full cervical dilation of 10 cm. Common signs and symptoms of the first stage include irregular contractions that gradually become regular and more intense, bloody show, and a change in vaginal discharge. Typically, the first stage of labor ends with full cervical dilation of 10 cm. Common signs and symptoms of the first stage include irregular contractions that gradually become regular and more intense, bloody show, and a change in vaginal discharge.

Active Orders

1. Continuous fetal monitoring - related to monitoring of fetal oxygenation and acid-base balance
2. Tocodynamometer (toco) monitoring - related to uterine contraction monitoring and the connection to fetal heart rate
3. Q1H blood glucose checks - related to monitoring blood sugars post-epidural and near the second stage of labor in a GDM patient
4. Q1H maternal vital signs - related to recent elevation of maternal blood pressure outside of normal limits
5. Q12H complete blood count (CBC) - related to platelet count of > 100 needed for epidural initiation
6. Clear liquid diet - After epidural initiation, solid food is restricted and the mother is limited to ice chips

the baby (Ricci et al., 2021). According to Ricci et al. (2021), during the second stage of labor, contractions increase in strength, contractions become more frequent at 2-3 minutes, and last longer at around 60-90 seconds. Ricci et al. (2021) explains that maternal vital signs and fetal heart rate will be regularly monitored during the second stage of labor. During this stage, the mother is concentrated and will often feel the spontaneous need to push (Ricci et al., 2021). Typical nursing interventions during this stage include motivating and supporting the mother and providing assistance with frequent position changes (Ricci et al., 2021). Signs that the mother is progressing to the third stage of labor include the birth of the child (Ricci et al., 2021).

Due to the mother not being in the second stage of labor, no clinical data applies to this patient.

N432 Labor and Delivery Concept map template

Stage 3

While the patient had not yet progressed to the third stage of labor, according to Ricci et al. (2021) the third stage of labor is characterized by the birth of the baby and ends with the delivery of the placenta. During the third stage, the mother will experience placental separation and placental expulsion (Ricci et al., 2021). According to Ricci et al. (2021), expected findings during the third stage of labor include continued uterine contractions and a decrease in uterine size. The mother should feel a sense of relaxation after the birth of the child due to decreased adrenaline levels (Ricci et al., 2021). Nursing care during the third stage of labor includes newborn care and assistance in placental delivery (Ricci et al., 2021). Signs that the mother is progressing to the fourth stage of labor include the delivery of the placenta (Ricci et al., 2021).

Due to the mother not being in the third stage of labor, no clinical data applies to this patient.

N432 Labor and Delivery Concept map template

<p>Nursing Diagnosis 1 Risk for shock <u>related to</u> increased risk for hemorrhage <u>as evidenced by</u> history of postpartum hemorrhage and implementation of bleeding protocols (Phelps, 2020).</p>	<p>Nursing Diagnosis 2 Risk for bleeding <u>related to</u> postpartum hemorrhage and pregnancy complication <u>as evidenced by</u> history of postpartum hemorrhage (Phelps, 2020).</p>	<p>Nursing Diagnosis 3 Risk for unstable blood glucose level <u>related to</u> pregnancy complication <u>as evidenced by</u> history of and current gestational diabetes mellitus and acute changes to blood glucose levels (Phelps, 2020).</p>
<p>Rationale for the Nursing Diagnosis This nursing diagnosis was chosen due to the significant health risks associated with shock. Due to the client's history of postpartum hemorrhage with her last pregnancy, the risk for a similar outcome is increased.</p>	<p>Rationale for the Nursing Diagnosis This nursing diagnosis was chosen due to the patient's increased risk for bleeding during and after the delivery process. This diagnosis is secondary to nursing diagnosis 1, but the increased bleeding risk still poses a significant risk to the patient's health.</p>	<p>Rationale for the Nursing Diagnosis This nursing diagnosis was chosen due to the client's extensive history of GDM and the changes to her blood glucose during the clinical experience. These factors made it apparent that interventions for blood glucose were needed.</p>
<p>Interventions Intervention 1: Monitor hemodynamic status frequently, including fluid status and vital signs, through all stages of pregnancy (Phelps, 2020). Rationale: This intervention will provide a baseline for patient vital signs and address any acute changes in the patient's status by allowing for early intervention and treatment (Phelps, 2020). Intervention 2: Administer intravenous fluids, other medications, and oxygen as needed to maintain fluid volume (Phelps, 2020). Rationale: Administration of fluids, medications, and oxygen will assist in maintaining proper fluid volume for the patient and allow for proper organ functioning (Phelps, 2020).</p>	<p>Interventions Intervention 1: Evaluate and monitor laboratory tests associated with bleeding hemodynamic status including a complete blood count, aPTT, and PT/INR (Phelps, 2020). Rationale: This intervention allows for the healthcare team to monitor laboratory trends and identify changes that may indicate a potential or active bleed (Phelps, 2020). Intervention 2: Implement evidence-based precautions and interventions that reduce the risk of an adverse bleeding event or condition (Phelps, 2020). Rationale: This intervention will address patient's bleeding risk, provide preventative measures, and provide reassurance to patient (Phelps, 2020).</p>	<p>Interventions Intervention 1: Assess and monitor blood glucose levels at point of care regularly (Phelps, 2020). Rationale: This intervention will allow for the early identification and interventions related to acute changes in blood glucose level (Phelps, 2020). Intervention 2: Educate patient on the signs and symptoms of hyperglycemia and hypoglycemia and instruct the patient to alert the nurse when experiencing these symptoms (Phelps, 2020). Rationale: This intervention allows the patient to play an active role in their care and allows for early identification and intervention (Phelps, 2020).</p>
<p>Evaluation of Interventions The patient responded well to these interventions. She understood the significant risks associated with high blood loss and was appreciative that the</p>	<p>Evaluation of Interventions The patient responded well to these interventions. Given her history of postpartum hemorrhage, she knew that proactive approaches needed to be</p>	<p>Evaluation of Interventions The patient was generally apprehensive about the frequent blood glucose checks, but after education she was accepting of regular monitoring given her</p>

N432 Labor and Delivery Concept map template

team was taking an active approach in preventing an adverse event.	taken in planning for a potential adverse bleeding event and she was open to these interventions.	history of GDM. The patient did want to limit finger sticks, but understood that they were needed to monitor her glucose levels.
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References (3):

Cleveland Clinic. (2022, April 27). *Group b strep pregnancy*. Retrieved on June 18, 2023 from <https://my.clevelandclinic.org/health/diseases/11045-group-b-streptococcus--pregnancy>

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