

N432 Concept Map Template: Labor and Delivery

Lakeview College of Nursing

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Medications

Prostaglandin Synthesis

Pharmacological class: Epirizone/phenibutolol (Joan & Barlett Learning, 2021)

Therapeutic class: Analgesic (Joan & Barlett Learning, 2021)

Dose: 50 mg every four hrs prn

Reasons variability: moderate to severe pain.

Key assessment: make sure to check for any allergies to medication (Joan & Barlett Learning, 2021)

Oxytocin (Pitocin)

Pharmacological class: "Oxytocin agonist" (Joan & Barlett Learning, 2021)

Therapeutic class: "Oxytocin hormone" (Joan & Barlett Learning, 2021)

Dose: 50 units/500ml ordered dose 4 ml.

Reasons induce labor (Joan & Barlett Learning, 2021)

Key assessment: assess a 20-minute Electronic Fetal Monitor tracing strip prior to administering. Assess fetal presentation and station (Brad document prior to administering (Joan & Barlett Learning, 2021)

Cytotec (Misoprostol)

Pharmacological class: prostaglandin (Joan & Barlett Learning, 2021)

Therapeutic class: prostaglandin E1 analgesic (Joan & Barlett Learning, 2021)

Dose: 25 mcg

Reasons to induce labor to woman and works by softening the cervix to allow easier dilation and producing contractions

Key assessment: make sure the patient isn't allergic to the medication, make sure there are no contraindications with any other medication the patient's taking to (Joan & Barlett Learning, 2021)

Lactated Ringer Solution, 125 mL, No Invertase, Iso-osmolar

Pharmacological class: "Electrolyte maintenance" (Joan & Barlett Learning, 2021)

Therapeutic class: "Normal fluid" (Joan & Barlett Learning, 2021)

Reasons electrolyte maintenance

Key assessment: Assess the patency of the IV (Joan & Barlett Learning, 2021)

Fentanyl

Pharmacological class: "Opioid" (Joan & Barlett Learning, 2021)

Therapeutic class: "Opioid analgesic" (Joan & Barlett Learning, 2021)

Dose: 50 mcg every 2 hours prn

Reasons Mild pain

Key assessment: Assess patient's oxygen saturation & respiratory (Joan & Barlett Learning, 2021)

Demographic Data

Admitting diagnosis: Induction

Secondary diagnosis: Gestational Diabetes mellitus, circumvallate placenta

Age of client: 28- years- old

Weight in kgs: 102.1 kg

Allergies: Propranolol

Date of admission: 9-7-2023

Support person present: Father of baby

Presentation to Labor and Delivery

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

Baseline EFH: beginning of shift: 140 EFH- end of shift: 135 EFH

Variability: beginning of shift: 6-25 moderate- end of shift: 6-23 moderate

Accelerations: beginning of shift: present- end of shift: present

Decelerations: beginning of shift: None- end of shift: None

Contractions: beginning of shift: irregular- end of shift: irregular

-frequency: beginning of shift: 4-9 minutes- end of shift: 2-3 minutes

-length: beginning of shift: 50-90 seconds- end of shift: 60- 80 seconds

-strength: beginning of shift: 2 out of 10- end of shift: 5 out of 10

-patient's response: pt stated her contractions weren't super strong right now.

Megan, a 28-year-old G5P3 woman who is 39 weeks and 5 days pregnant, is being admitted for labor induction. No complaints have been made by the patient. It's normal for a fetus to move. Since the patient was 15 weeks pregnant, she has been receiving prenatal care from a qualified nurse midwife at Christie Clinic. Obesity, a BMI of 33.64, a circumvallate placenta, and gestational diabetes have affected the patient's pregnancy. The patient is on a restricted diet, and the most recent growth ultrasound was performed at 39 weeks and 3 days. Electronic fetal heart monitoring: 4026g, 80lbs, 14 oz, 90th percentile for total growth.

Stages of Labor		Active Orders
<p>Stage 1</p> <p>The first stage of labor starts when the mother</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p style="text-align: center;">Prenatal & Current Lab Values/Diagnostics</p> <p>MCHC: Normal range: 32-36 Abnormal: 35.5</p> <p><small>This abnormal level was estimated from Carle Epic, the normal value was taken from (Gotter, 2023)</small></p> <p>Glucose: Normal range: 140mg/dL abnormal value: one hour: 148mg/dL - three hour: 141mg/dL</p> <p><small>This normal and abnormal values were taken from (Carle Epic).</small></p> <p>GBS: Negative</p> <p>HIV: Non-reactive</p> </div>	<p style="text-align: center;">Medical History</p> <p>Prenatal History: G: 5 T: 3 P: 0 A: 1 L: 3</p> <p>Previous Medical History: N/A</p> <p>Surgical History: appendix removed, eye surgery in both left and right eye.</p> <p>Family History: N/A</p> <p>Social History: patient states she currently smokes cigarettes, know street drugs, or alcohol of any kind.</p>	<p style="text-align: center;">Active Orders</p> <p>Position change for category II tracing</p> <p>Active- ambulating to promote good blood circulation and prevent bed sore.</p> <p>Diabetic diet to maintain a healthier nutritional diet due to patient having gestational diabetes.</p> <p>EFM- to monitor the baby's heart rate.</p> <p>Complete OR hemorrhaging risk score to see what patient risk for hemorrhaging is.</p> <p>Q4 vital signs to check patient's vitals every four hours.</p> <p>Strict I/O to monitor patients' intake and output.</p> <p>IV assess to assist patient with fluids or medications.</p> <p>Type and Screen to get blood type RH factor.</p> <p>Blood bank hold tube in case of a hemorrhage.</p>

Stage 2

The second stage of labor starts when the mother's cervix becomes fully dilated (10 centimeters) and ends when the mother delivers the baby. The second stage can last for minutes or even hours. The mother is focusing on actively pushing to deliver the baby during this stage of labor. Contractions are more frequent, typically 2 to 3 minutes apart from one another and the duration of the contractions tend to be anywhere from 60 to 90 seconds (Ricci et al., 2021). This student nurse was not present during stage two.

Stage 3

The third stage of labor starts when the mother delivers the baby and ends when the mother delivers the placenta. The third stage of labor typically lasts from 5 to 30 minutes. During this stage of labor, the uterus continuously contracts to deliver the placenta, and the mother may need to push to deliver the placenta (Ricci et al., 2021). This student nurse was not present during stage three.

Nursing Diagnosis 1 Gestational diabetes mellitus failed labor related to uncontrolled sugars as evidence by patient having a large baby.	Nursing Diagnosis 2 At risk for hemorrhage related to estimated fetal weight being elevated (4000g) as evidence by previous ultrasound weight being 4026g.	Nursing Diagnosis 3 At risk for infection related to frequent cervical checks as evidence by nurse checking cervix
Rationale for the Nursing Diagnosis This nursing diagnosis was chosen because the patient has a history of GDM. The baby is at risk for excessive birth weight. If sugar level is higher than the standard range, it causes the baby to grow larger.	Rationale for the Nursing Diagnosis This nursing diagnosis was chosen because the estimated fetal weight was elevated over 4000g so that puts the mother at risk for hemorrhage while delivering a large baby.	Rationale for the Nursing Diagnosis This nursing diagnosis was chosen because the patient is at risk for infection due to the nurse having to check the cervix frequently to see had the patient dilated. The patient is expose to multiple portals of entry (IV, frequent cervical checks).
Interventions Intervention 1: the nurse checked the patients	Interventions	Interventions

<p>sugar every couple of hours</p> <p>Rationale: this intervention was done to help patient sugar levels stay within normal range (Carle epic)</p> <p>Intervention 2: the patient was placed on a strict diabetic diet (Carle epic)</p> <p>Rationale: this helps to keep the patient eating healthy meals and to limit fatty food</p>	<p>Intervention 1: hemorrhage risk score</p> <p>Rationale: this intervention helps to determine the patient's risk for hemorrhage</p> <p>Intervention 2: closely monitoring the patient for risk of bleeding.</p> <p>Rationale: With the patient having a large baby that increase the risk for bleeding after giving birth which also increase the risk for hemorrhage.</p>	<p>Intervention 1: effective hand hygiene is necessary</p> <p>Rationale: this intervention helps to maintain cleanliness (Phelps, 2020).</p> <p>Intervention 2: frequent checks of temperature (Carle epic).</p> <p>Rationale: This intervention was done to ensure that the patient's temperature was not elevated, which is a common sign of infection.</p>
<p style="text-align: center;">Evaluation of Interventions</p> <p>The patient's sugar levels stay within normal limits</p>	<p style="text-align: center;">Evaluation of Interventions</p> <p>This patient bleeding will be under controlled</p>	<p style="text-align: center;">Evaluation of Interventions</p> <p>The patient will display vital signs within normal range and remain free of infection.</p>

References (3):

Jones & Bartlett Learning. (2022). *2022 Nurse's drug handbook* (19th ed.). Jones & Bartlett Learning

Phelps, L. L. (2020). *Sparks & Taylor's Nursing Diagnosis Reference Manual*. Wolters Kluwer.

Ricci, S. S., Kyle, T., & Carman, S. (2021). *Maternity and pediatric nursing* (4th ed.). Wolters Kluwer.

Gotter, A. (2023, July 11). *What does it mean to have low MCHC?* Healthline. <https://www.healthline.com/health/low-mchc#:~:text=Understanding%20the%20results%3A%20Low%20vs,this%20range%20can%20indicate%20anemia.>