

N432 Labor and Delivery Concept Map Template

| Medications | | | | | | |
|---|--|-----------|-------|-----------|---------------------------|---|
| Name | Class: Pharmacologic (P) and Therapeutic (T) | Dose | Route | Frequency | Reason | Nursing Assessments |
| Acetaminophen | P: Nonasicyclate, para-aminophenol derivative T: Antipyretic, nonopioid analgesic | 500 mg | PO | PRN Q4H | Analgesia | Monitor for liver dysfunction (bleeding/bruising). Hold if in active respiratory distress (may depress respiratory drive) |
| Ampicillin | P: Aminopenicillin T: Antibiotic | 1 g | IVP | Q4H | GBS+ | Monitor for signs of superinfection. Monitor stools for bleeding and steatorrhea |
| Ephedrine | P: Symathomimetic T: Antihypotensive | 5 mg | IVP | PRN Q1min | Systolic <100 mmHg | Monitor blood pressure. Do not administer if mother plans to breastfeed |
| Famotidine | P: Histamine-2 blocker T: Antulcer agent | 20 mg | PO | PRN Q12H | Gastric ulcer prophylaxis | Monitor for bloody/black stools. Avoid concurrent use of other antulcer agents. Ensure drugs utilizing the acidic pH of the stomach are not administered within two hours after this drug |
| Ondansetron | P: Selective serotonin (5-HT ₃) receptor antagonist T: Antiemetic | 4 mg | IVP | PRN Q6H | Nausea | Monitor potassium and magnesium, blood pressure |
| Oxytocin | P: Oligopeptide hormone T: Uterine contraction stimulator | 12 mU/min | PO | Daily | BPH | Monitor orthostatic hypotension and diarrhea |
| All information pertaining to pharmacologic/therapeutic classes and pertinent nursing assessments obtained from Jones & Bartlett Learning (2023). | | | | | | |

| Demographic Data |
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| Admitting diagnosis: Singleton pregnancy |
| Secondary diagnosis: N/A |
| Age of client: 26 years |
| Weight in kgs: 138.3 |
| Allergies: Sulfamethoxazole-trimethoprim (rash) |
| Date of admission: 07/10/2023 |
| Support person present: Father of child (R.) |
| Presentation to Labor and Delivery |
| This patient was at a prenatal visit and presented with hypertension as well as a blood sugar of 131. Because this patient has been considered at risk for GDM, this made her extremely anxious and caused her blood pressure to worsen even more, so she was directly admitted to Carle OB. A prior sonogram detected normal fetal movement and the presence of fetal VSD, though a new sonogram from 07/11 showed only normal fetal movement. The mother entered Carle OB without contractions, bleeding, ROM, or any symptoms of her high blood pressure. The plan was to stabilize the mother's blood pressure (originally 140/100) before inducing labor. |

| Electronic Fetal Heart Monitoring: |
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| Baseline EFH: 145bpm → 150bpm |
| Variability: 5-25bpm (moderate) → 5-25bpm (moderate) |
| Accelerations: Present → Present |
| Decelerations: Absent → Absent |
| Contractions: |
| -frequency 2-3 min → 2 min |
| -length 55 s → 55 s |
| -strength Mild → Strong |
| -patient's response "Pressure, not the worst I have had." Stated with a smile. → "A lot more pressure." Stated with grimacing. |

Stages of Labor

Prenatal & Current Lab Values/Diagnostics

| Lab/Test (unit) | Expected Range (individual result) | Prenatal Value | Today's Value |
|-----------------|------------------------------------|-------------------|---|
| Sonogram | | No acute findings | Normal fetal movement, Cephalic position This position is considered ideal for pregnancy (Van Leeuwen & Bladh, 2021). |
| Albumin (g/dL) | 3.5 – 5.0 | 3.1 | 2.9 Asymptomatic hypalbuminemia (as in this patient) is a result of pregnancy's dilutional effects (Ricci et al., 2021). |
| HbA1c | 4.0 – 7.0 | 5.4 | 5.3 Both values are normal but were included because the patient was at risk for GDM. |
| POC Glucose | 70 – 99 | 77 | 99 Both values are normal but were included because the patient was at risk for GDM. |
| GBS | Negative | Positive | Positive May cause symptoms in newborn, though the mother is typically asymptomatic (Ricci et al., 2021). |

Normal ranges obtained from Carle Foundation Hospital (2023). This list is not comprehensive of all labs/diagnostics; omitted values were within expected ranges.

Medical History

Prenatal History: G2-T1-P0-A0-L1

Prior uncomplicated vaginal delivery at 39w6d with SROM; LMP 10/10/2022; Began prenatal care at approximately 12 weeks after suspecting pregnancy at 6 weeks; 12 total prenatal visits; Weekly prenatal visits starting at 34 weeks; No suspected complications in this pregnancy

Previous Medical History: HSV2 (no active lesions); GAD; Maternal obesity; Macrosomia in prior birth; Hypothyroidism (managed with Rx); GBS+, Gestational HTN

Surgical History: Wisdom tooth extraction (2019)

Family History: Father – HTN; Mother – None; Grandparents – None; Siblings – None

Social History: Patient denies use of alcohol, tobacco, marijuana, and other substances

in centimeters via vaginal examination. The session continues until the cervix has dilated

Active Orders

Ampicillin Q2H – GBS+

Avoid supine positioning – Decelerations

EFM and Toco – Monitor fetal status

Indwelling Foley catheter – Maintain drainage of urine

Strict I&O – Risk for HTN

Reposition Q30min – Encourage progress of labor

Diet: “Sips and chips” – Risk for HTN

Vital signs Q4H; BP Q30min; Temp Q2H

On the mother's vagina, rectum, and perineum, pushing phase of the second stage of labor lasts for an increased amount of time, the mother is at an increased risk of lacerations and hemorrhage. As noted, the second stage of labor lasted only three minutes in this patient, though in most cases it lasts two to three hours. Once the fetus has descended far enough that its head no longer disappears from the vaginal opening between contractions, it is said that the fetus is crowning (Ricci et al., 2021). In this patient, the nurse received the order to perform a vaginal examination, which revealed the patient was at 10 centimeters of dilation. The healthcare team observed uterine contractions on the monitor and instructed the mother to push with the next contraction. She was able to push for the majority of this contraction, and crowning occurred after this singular push. With the first push of the following contraction, the fetus was delivered on 07/11 at 1248. There were no complications to the newborn during this labor, though the mother suffered a first-degree tear which received successful repair. If this tear were not properly repaired, it would contribute to an increased risk of infection and hemorrhage.

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Stage 3: 9 minutes in this patient

The third stage of labor begins once the newborn has exited the birth canal. It is recommended that newborns be placed on the mother's abdomen to initiate skin-to-skin contact and provide a smooth transition to life outside the uterus. There are two phases to the third stage of labor: placental separation and placental expulsion (Ricci et al., 2021).

During placental separation, the uterus still contracts strongly and begins to retract once the newborn has exited, which causes the uterus to greatly decrease in size. This, in turn, causes the placenta to separate from the wall of the uterus. When this occurs, the uterus rises upward, the umbilical cord will lengthen, blood will suddenly trickle from the vaginal opening, and the uterus will assume a globular shape (Ricci et al., 2021).

During placental expulsion, the continuous contractions of the uterus aid in birth of the placenta, and this may take two to thirty minutes. However, if a gentle pulling force is applied to the umbilical cord, this will facilitate a more rapid expulsion of the placenta. Once the placenta has fully delivered, it will be inspected by the provider, and the fundal massage will occur in order to aid in vasoconstriction within the uterus, thus minimizing blood loss. A vaginal birth may contribute to a blood loss of about 500 mL, and this is considered normal until over 1000 mL. Additionally, if inspection of the placenta reveals that fragments may be left in or on the uterus, the risk of hemorrhage is even further increased, and surgical intervention may be required to remove the retained placental fragments (Ricci et al., 2021).

This patient delivered a fully intact placenta with no retained fragments, and this occurred approximately nine minutes after the birth of the newborn. She tolerated the fundal massage though later said, "That was the main thing I was dreading after I got pregnant. It's a punch in the ovaries... literally." Her uterus assumed a more globular position and was firm without apparent issue.

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| <p>Nursing Diagnosis 1 Impaired skin integrity related to labor complication as evidenced by skin laceration</p> | <p>Nursing Diagnosis 2 Readiness for enhanced parenting related to psychosocial, financial, and reliable parenting techniques as evidenced by discussion of caring for firstborn and describing prenatal planning.</p> | <p>Nursing Diagnosis 3 Risk for bleeding related to postpartum complication</p> |
| <p>Rationale for the Nursing Diagnosis The mother suffered a first-degree laceration due to the vaginal birth</p> | <p>Rationale for the Nursing Diagnosis This patient has demonstrated proper care of her firstborn and discussed how she and her husband baby-proofed the house, bought nonperishable supplies lasting for several months, and instructed their firstborn on how he can "help" with taking care of his new sister.</p> | <p>Rationale for the Nursing Diagnosis The mother suffered a first-degree laceration due to the vaginal birth and has a history of HTN</p> |
| <p>Interventions Intervention 1: Educate patient to avoid scratching the area, as this may dislodge stitches and</p> | <p>Interventions Intervention 1: Discuss with parents their perceptions and philosophies related to the role of</p> | <p>Interventions Intervention 1: Assess wound healing at least once per shift</p> |

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| <p>introduce pathogenic organisms to the wound bed Rationale: This will help mitigate infection risk and promote wound healing Intervention 2: Apply and monitor the effectiveness of antipruritic medications Rationale: This will decrease pain/itching</p> | <p>parents in a family. Rationale: This helps the parents organize their thoughts out loud and provides the opportunity to ask questions. Intervention 2: Support family efforts as they adapt to the ever-changing issues of family needs. Rationale: This enhances motivation and provides validation</p> | <p>Rationale: This will help ensure the wound is not reopening and potentially bleeding Intervention 2: Continuously monitor vital signs Rationale: This would help assess for the effects of blood loss and would point toward any non-obvious bleeding</p> |
| <p>Evaluation of Interventions This patient stated that the antipruritic spray seemed to ease the itching and made the affected area “feel less like it’s on fire.” She agreed to avoid scratching the wound and hopes it will promote healing.</p> | <p>Evaluation of Interventions This patient and her husband seemed excited to discuss the change in their family and are looking forward to raising their daughter. They appreciated talking about their plans and hope to do well as parents.</p> | <p>Evaluation of Interventions The patient responded affirmatively to the nurse’s actions. She is willing to assess the wound herself and report any concerns. She wishes to have her vital signs monitored at all times.</p> |

The nursing diagnoses, interventions, rationales, and evaluations were formulated using guidelines published by Phelps (2020).

References

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