N432 Labor and Delivery Concept map template

Medications

FentaNYL-ropivocaine 2-0.2 mcg/mL-% premix
Dose: 10mL/hr continuous
Pharmacological class: Opioid (Nurse's Drug Handbook, 2022).
Therapeutic class: Opioid analgesic (Nurse's Drug Handbook, 2022).
Reason for taking: pain related to labor
Key nursing assessment prior to administration: Monitor the patient's respiratory status closely for respiratory depression. Monitor the patient for toxicity (Nurse's Drug Handbook, 2022).
Lactated Ringers 500 mL IV bolus
Pharmacological class: Isotonic fluids (Drugs.com, 2023).
Therapeutic class: buffered solution (Drugs.com, 2023).
Reason for taking: water and electrolyte replacement (Drugs.com, 2023).
Key nursing assessment prior to administration: Monitor the patient for potassium toxicity, and monitor the IV site for infiltration (Drugs.com, 2023).
Metoclopramide/Reglan Injection
Dose: 10 mg Q6 PRN
Pharmacological class: Dopamine-2 receptor antagonist (Nurse's Drug Handbook, 2022).
Therapeutic class: Antiemetic (Nurse's Drug Handbook, 2022).
Reason for taking: Nausea/vomiting
Key nursing assessment prior to administration: Monitor patient for depression or suicidal ideation due to this medication potentially increasing this risk (Nurse's Drug Handbook, 2022).
Oxytocin 30 units in 500 mL 0.9% sodium chloride IV
Dose: 1-20 mu/minute
Pharmacological class: cyclic nonapeptide hormone (Multum, 2023).
Therapeutic class: Oxytocic hormones (Multum, 2023).
Reason for taking: assist in stopping bleeding following delivery (Multum, 2023).
Key nursing assessment prior to administration: Monitor the patients bleeding (Multum, 2023).
Stadol/butorphanol Injection
IM injection Q4 PRN
Pharmacological class: Opioid agonist-antagonist (Nurse's Drug Handbook, 2022).
Therapeutic class: Anesthesia adjunct, opioid analgesic (Nurse's Drug Handbook, 2022).
Reason for taking: Severe pain
Key nursing assessment prior to administration: Assess respiratory status closely for respiratory depression. Assess patient for dizziness or hypotension (Nurse's Drug Handbook, 2022).

Demographic Data

Admitting diagnosis: Labor

Secondary diagnosis: Gestational Diabetes Mellitus

Age of client: 36 y.o.

Weight in kgs: 83 kg.

Allergies: No known drug allergy. The patient reports a shellfish allergy.

Date of admission: 02/28/2024

Support person present: Husband

Presentation to Labor and Delivery

The patient is a 36-year-old female with a prenatal history of G2P1 and is 39 weeks' gestation. The patient arrived at labor and delivery after having a rupture of membranes at 0700 with "clear colored fluid" as stated by the patient. The patient has had a complicated pregnancy related to her gestational diabetes mellitus. Her gestational diabetes mellitus has been well managed by diet. The patient was 4 cm dilated upon arrival and was admitted for delivery.

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

Baseline EFH: 0800: 120 bpm; 1200: 120 bpm

Variability: 0800: Moderate; 1200: Moderate

Accelerations: 0800: yes; 1200: yes

Decelerations: 0800: early decelerations; 1200: early decelerations

Contractions:

-frequency: 0800: 3 minutes; 1200: 2.5-3 minutes

-length: 0800: 60-70 seconds; 1200: 1 minute

-strength: 0800: moderate; 1200: moderate

-patient's response: 0800: The patient was calm and attentitive.;1200: The patient was moaning and grunting in pain but remained attentive to the labor progress. The patient was given breathing techniques to promote a calming environment.

N432 Labor and Delivery Concept map template

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Stage 1

Stage 1 of labor is the longest stage of the labo … e and an active phase. Latent phase is defined as the time in which the patient is betw … in 6-10 cm of dilation (Ricci et al., 2021-pg 456). During the latent phase contractions ofte … . The contraction may be mild during this time (Ricci et al., 2021-pg 456). The active phas … tion of 45-60 seconds (Ricci et al., 2021-pg

Prenatal & Current Lab Values/Diagnostics

WBC:
Normal value: 5.0-10 x 10(9) calls/L (Nurselabs.com, 2019).
Prenatal value: 15.30; These levels may be elevated in relation to inflammation or the patient's diagnosis of gestational diabetes mellitus (Martin, 2019).
Current value: 12.10; These levels may be elevated in relation to inflammation or the patient's diagnosis of gestational diabetes mellitus (Martin, 2019).
RBC:
Normal value: 4.5-5.0 x 10(12)/ L (Martin, 2019).
Prenatal value: 3.97 x 10(12)/ L; Levels may be decreased related to iron deficiency anemia
Current value: 3.30 x 10(12)/ L; Levels may be decreased related to iron deficiency anemia
Hgb:
Normal value: 12-15 g/dL (Martin, 2019).
Prenatal value: 10.9 g/dL; Levels may be decreased related to iron deficiency anemia
Current value: 10.5 g/dL; Levels may be decreased related to iron deficiency anemia
Hct:
Normal value: >33% (Martin, 2019).
Prenatal value: 34.1%; Lab values are within normal range.
Current value: 29.9%; Labe values are within normal range.
Platelet:
Normal value: 150-400 x 10(9)/L (Martin, 2019).
Prenatal value: 393 x 10(9)/L; Lab values are within normal range.
Current value: 182 x 10(9)/L; Lab values are within normal range.
Neutrophils:
Normal value: 55-70% (Martin, 2019).
Prenatal value: 73.5%; These levels may be elevated in relation to inflammation or the patient's diagnosis of gestational diabetes mellitus (Martin, 2019).
Current value: 63.3%; Lab value within normal range.
Lymphocytes:
Normal value: 20-40% (Martin, 2019).
Prenatal value: 19.2%; These levels may be elevated in relation to inflammation or the patient's diagnosis of gestational diabetes mellitus (Martin, 2019).
Current value: 26.8%; Lab values within normal range.
Monocytes:
Normal value: 2-8% (Martin, 2019).
Prenatal value: 5.6%; Lab values within normal range.
Current value: 7.5%; Lab values within normal range.
Monocytes:
Normal value: 2-8% (Martin, 2019).
Prenatal value: 5.6%; Lab values within normal range.
Current value: 7.5%; Lab values within normal range.
Eosinophils:
Normal value: 1-4% (Martin, 2019).
Prenatal value: 1.1%; Lab values within normal range.
Current value: 2.1%; Lab values within normal range.
Basophils:
Normal value: 0.5-1% (Martin, 2019).
Prenatal value: 0.6%; Lab values within normal range.
Current value: 0.5%; Lab values within normal range.

-Blood type: O+
-Hepatitis: Negative; Lab values are within normal range.
-GBS: Negative; Lab values are within normal range.
-Rubella immune.

Medical History

Prenatal History: G2P1T2A0L1

Previous Medical History: History and current diagnosis of gestational diabetes mellitus and iron-deficiency anemia. No other medical history noted or reported.

Surgical History: No surgical history noted or reported.

Family History: No surgical history noted or reported.

Social History: The patient denies any alcohol, drug, or tobacco use.

Active Orders

-Monitor the patients' blood pressure, pulse and respiratory rate every 15 minutes. (This is done to monitor the status of the mother during active labor to ensure the mother is stable.)

-Monitor temperature every 2 hours following rupture of membranes. (The rupture of membranes increases the risk of infection; therefore, this is checked frequently to monitor potential infection.)

-Continuous fetal monitoring. (This is performed to monitor the baby's status to ensure there is not fetal distress and decrease in fetal heart rate.)

-Clear liquid diet (This is to decrease food intake to avoid aspiration in the event that an emergency c-section is needed).

-Strict bed rest (This is related to the shoulder dystocia of the newborn to decrease additional risk or injury).

-Check blood sugar: This is to ensure the mother has a stable blood sugar due to her gestational diabetes.

duration of 60-90 seconds with strong intensity and pressure to push (Ricci et al., 2021-pg 456). If the mother has chosen to do so, this stage is when the mother would be relying on an epidural to assist in managing pain. During stage 2 the fetus has descanted into the vaginal canal and is now causing continuous pressure in the vagina and rectum (Ricci et al., 2021-pg 458). There will be an expanded bulging of the perineum when the newborn begins to crown. During this time the baby will guide their way out (Ricci et al., 2021-pg 458). The patient had all expected findings during this stage of labor. The patient was fully dilated, and the newborn had begun to crown. During this phase of labor there was a determination of shoulder dystocia. This requires emergency assistance to safely remove the newborn without causing injury to either the mother or the newborn. The nurse applied suprapubic pressure to assist the provider in performing the McRoberts maneuver. The patient will be positioned with their legs up towards their abdomen in order to properly position the cervix. Once the newborn has safely been removed from the vaginal canal and is born, the mother will begin to move into stage 3 of labor (Ricci et al., 2021-pg 458). The patient was properly positioned to perform McRoberts maneuver and was able to successfully deliver the newborn baby with assistance.

Stage 3

Stage 3 of labor starts once the newborn has made their appearance. The mother will continue to experience contractions in order to properly deliver the placenta (Ricci et al., 2021-pg 458). Skin to skin contact begins during this stage of labor, therefore once the newborn is able, they are placed directly on their mother's chest for skin to skin contact and bonding (Ricci et al., 2021-pg 458). This stage of labor should be monitored extremely closely due to the increased risk of postpartum hemorrhage when the placenta is detached. Therefore, during this stage, the patient will receive medication such as Oxytocin which stimulates contractions of the uterus to control or stop bleeding. There are two different phases of stage 3 of labor. The first phase encountered includes placental separation, this is when the placenta detaches from the uterine wall and begins to deliver. The signs related to this phase include longer umbilical cord, blood, uterus rises upward, and the uterus will acquire a globular shape (Ricci et al., 2021-pg 459). The next phase of stage 3 of labor includes the placental expulsion phase, after the placenta has successfully detached from the uterine wall it will slowly be pushed out by continued contractions. Once the placenta has been removed the staff will provide a massage to the uterus to decrease the risk of excessive or continued bleeding. During this stage of labor, the patient successfully delivered the newborn baby with the assistance of the McRoberts Maneuver. The newborn is a male born at 1400 on 2/28/24. The assessment findings included Chest circumference of 33.2 cm, head circumference of 34.5cm, Weight was 3140g, Height was 50.8 cm, and APGAR 1 minutes: 9 & 5 minutes: 9. The mother and newborn initiated skin to skin contact immediately. The nursing student was not present for stage 3 of labor for the delivery of the placenta.

N432 Labor and Delivery Concept map template

Nursing Diagnosis 1 Risk for postpartum hemorrhage/bleeding related to uterine trauma as evidence by shoulder dystocia and suprapubic pressure during McRoberts maneuver.	**Nursing Diagnosis 2** Risk for unstable blood glucose levels related to a medical diagnosis of gestational diabetes mellitus as evidence by low blood sugar readings.	**Nursing Diagnosis 3** Risk for pain related to prolonged pressure as evidence by shoulder dystocia, suprapubic pressure during McRoberts maneuver, and use of epidural.
Rationale for the Nursing Diagnosis The patient is at high risk for postpartum hemorrhage due to experiencing shoulder dystocia. The pressure and movements required to deliver increase the risk of excessive bleeding.	**Rationale for the Nursing Diagnosis** The patient was diagnosed for gestational diabetes mellitus. If this diagnosis is not treated and monitored closely during the pregnancy and delivery it can harm the mother and the newborn.	**Rationale for the Nursing Diagnosis** The patient encountered shoulder dystocia during labor. The staff had to apply suprapubic pressure with the McRoberts maneuver. This can increase the patient's postpartum pain.
Interventions **Intervention 1:** Monitor the patient for signs/ symptoms of Postpartum hemorrhage such as severe abdominal pain, change in lochia, fever, or dizziness. **Rationale:** This intervention is needed to evaluate the risk and prepare for hemorrhage. If the staff is monitoring the patient then they will know what to be aware of when considering hemorrhage (Phelps, 2023-pg 53). **Intervention 2:** Implement precautions to avoid or prevent postpartum hemorrhage such as administering oxytocin as ordered or fundal massages if active bleeding begins. **Rationale:** The staff should take proper precautions to decrease the risk of postpartum hemorrhage (Phelps, 2023-ph 53). Oxytocin will induce contraction to constrict blood vessels in the uterus to decrease bleeding. Fundal massage can contract the blood vessels in the uterus to reduce bleeding.	**Interventions** **Intervention 1:** Monitor the patient for signs and symptoms that may indicate hypoglycemia. **Rationale**: It is crucial to understand the common signs and symptoms of hypoglycemia so that staff can respond correctly. Long term altered blood glucose levels can impact the cranial nervous system, even leading to or causing cardiac arrest or an affected airway (Phelps, 2023-pg 56). **Intervention 2:** Monitor and obtain regular blood glucose level checks throughout delivery to ensure the mother has a stable blood glucose level. **Rationale:** Monitoring the glucose levels is important because the blood glucose level reading will determine the form of treatment provided. It is crucial to ensure the mother is stable (Phelps, 2023-pg 56).	**Interventions** **Intervention 1:** Assess the patient's level of pain using a pain scale and monitor the patients pain response. **Rationale:** Assessing the patients pain via a pain scale allows the provider to understand the level of pain the patient is encountering. Pain can be subjective, therefore using a pain scale allows the patients pain to be comparable and better understood (Phelps, 2023-pg 464). **Intervention 2:** Provide measures the reduce pain such as relaxation techniques, ice pack, or medication as ordered. **Rationale:** The staff can provide education or relaxation techniques to assist the patient in reducing their pain. The relaxation technique could even be something as quick as a distraction. The staff should also supply items that relieve pain such as an ice pack to reduce swelling and pain, or any ordered medication (Phelps, 2023-pg 465).
Evaluation of Interventions The patient did not have any complications following preventative measures implemented.	**Evaluation of Interventions** The patient was able to maintain a stable blood glucose level during delivery and following postpartum. No further complications noted. The	**Evaluation of Interventions** The patient was receptive to plan of care. No additional complications were noted. The patient

The patient did not show any further signs of postpartum hemorrhage.	patient responded well to treatment and plan of care.	received treatment for pain (medication) and remained stable and comfortable.

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