

N432 Labor and Delivery Concept map template

Medications

Nifedipine (Procardia)-> 10 mg PO every 6 hours
-Pharmacological class: Calcium channel blocker
-Therapeutic class: Antianginal, antihypertensive
-Use: Manages hypertension
-Nursing assessment: Use cautiously in patients with cirrhosis because it is unknown how nifedipine exposure may be altered in these patients.

Ondansetron hydrochloride (Zofran)-> 4 mg PO daily
-Pharmacological class: Selective serotonin receptor antagonist
-Therapeutic class: Antiemetic
-Use: Prevents nausea and vomiting
-Nursing assessment: Know that if hypokalemia or hypomagnesemia is present, these electrolyte imbalances should be corrected before ondansetron is administered because of increased risk for QT-interval prolongation

Vancomycin (Vancocin)-> 1.5 gm in 100 mL IV Q4
-Pharmacological class: Glycopeptide
-Therapeutic class: Antibiotic
-Use: Treat infections caused by bacteria
-Nursing assessment: Be aware that vancomycin is not indicated for prophylaxis of endophthalmitis, nor should it be administered intracamerally or intravitreally

Betamethasone (Celestone)-> 12 mg IM daily
-Pharmacological class: Corticosteroids
-Therapeutic class: Corticosteroids
-Use: Treats itching and irritated skin
-Nursing consideration: Examine area for infections and skin integrity before application

Oxytocin (Pitocin)-> 125 mL IV Q1
-Pharmacological class: Oxytocic agent
-Therapeutic class: Oxytocic agent
-Use: causes uterus to contract used to induce labor
-Nursing consideration: Report seizures or coma-like responses to the physician

Demographic Data

Admitting diagnosis: Preterm labor

Secondary diagnosis: N/A

Age of client: 28 yrs. old

Weight in kgs: 130 kg

Allergies: Diltiazem and Penicillin

Date of admission: 4/1/21

Support person present: Boyfriend

Presentation to Labor and Delivery

The patient came into the ED with contractions a few hours ago but thought they were Braxton Hicks. She started experiencing the contractions on her abdomen. The contractions were intermittent and did not experience them continuously. The contractions are often an "aching pain" in the abdomen. The patient also feels anxious and nauseated. The contractions began when she got up to go to the bathroom. Bed rest helps the patient with their contractions. The pain does not radiate anywhere else. The patient was given lactated ringers at 100 mL/hr. The patient does not verbalize her pain level.

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

Baseline EFH: 150

Variability: Beginning-> minimal variability noted, less than 5 change. End-> moderate variability noted, between 5-25

Accelerations: Beginning-> accelerations. End-> no accelerations

Decelerations: No decelerations in the beginning and variable decelerations in the end

Contractions:

-frequency: Beginning-> 2-4.5 min apart. End-> 1-1.5 min apart

-length: 60-90 secs

-strength: Mild to strong

-patient's response: The patient experienced an increase in contractions at the beginning. Towards the end, she experiences a lot of pressure on the bottom. Towards the delivery, the frequency and strength of contractions increases. At the end, the contractions disappear

Prenatal & Current Lab Values/Diagnostics

ALB: 2.6 (3.4-5.4)-> It can be caused by a lack of nutrition amongst pregnant women (Pagana et al., 2019)

CO2: 21.6 (23-29)-> An increase in progesterone levels during pregnancy can cause a decrease in CO2 (Pagana et al., 2019)

Urine-GBS: Positive (Negative)-> there is bacteria in her body (Pagana et al., 2019)

Medical History

Prenatal History: She started prenatal care at 10 week and was diagnosed with gestational diabetes at 28 weeks. The glucose tolerance test was 190 and is controlling her blood sugars by a 2200 caloric diabetic diet. She tests her blood sugars twice a day. She fasts before breakfast and before her evening meal. She takes prenatal vitamin with iron and takes acetaminophen for pain.

Previous Medical History: N/A

Surgical History: She had her appendix taken out at 7 years old

Family History: Father has high blood pressure, mother had breast cancer

Social History: N/A

Active Orders

- Place the patient on an external fetal monitor
 - It helps to track the fetal heart rate
- Perform a vaginal exam
 - It shows how many cm the patient is dilated
- Bedrest with bathroom privileges
 - Bed rest as much as possible helps to ease the contractions and relieve excessive pain
- Do accuchecks on patient
 - It is important to track the patient's sugar levels since she is currently controlling her blood sugars
- Track the patients input and output
 - Check for dehydration since it can cause harm to the patient and baby if fluid intake is not maintained
- Monitor the patients vital signs Q4
 - It is important to assess the clinical status of the patient during contractions. It helps to assess if the medication for hypertension is working

Stages of Labor

Stage 1

During the 1st stage of labor, the contractions will make the cervix dilate. The 1st stage is usually the longest stage of labor. The patient may experience irregular contractions. The patient may experience recurring pain in the stomach and lower back. The blood pressure starts to increase during this stage. During this stage it is important to do bedrest as much as possible. The patient will also be put on continuous fetal monitoring. Longer and stronger contractions indicate that the patient is going into the second stage of labor. The patient began to contract and felt a gush of fluid when she got up to go to the bathroom. An Amnisure test was done to assess for ROM. The provider gave her vancomycin to help treat symptoms of infection. The vital signs were T 99 oral, P 98, R 18, B/P 134/88. The patient's blood pressure was high. The vaginal exam indicated that she was 5 cm dilated. The contractions increased in frequency and strength. She felt nauseated, so she was given an Ondansetron 4 mg oral disintegrating tablet. The patient is turned to the side and 3 L of oxygen is given. The fetal heart rate drastically changes. The staff proceeds to set the patient up for delivery.

Stage 2

In the second stage, the cervix is fully dilated and ready for childbirth. The stage can be as short as 20 minutes or a few hours. The patient's pulse rate may increase due to the increased pain on the bottom of the abdomen. The patient starts to push a couple of times to allow the baby to come out. The patient may also experience cramps, nausea, and a burning sensation in the vagina during this stage. The nursing staff will do their best to provide comfort. They will encourage the patient to focus on their breathing. The delivery of the baby indicates the last stage of labor. A male infant was delivered after 4 pushes. The infant weighs 2023 grams and 18 inches long.

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Stage 3

The last stage of labor indicates the delivery of the placenta. The placenta and membranes that support the baby in the uterus come out. The patient's blood pressure tends to settle down. A gush of blood is usually estimated during the third stage. The nurse helps guide the placenta out by giving an injection to help the uterine contract. The gush of blood was estimated to be 350 mL. A uterine massage was started, and they were given 40 units of Pitocin with 1000 mL of LR. The patient's recovery continued with minimal uterine massage and no gushes of blood. The patient is monitored every 4 hours for bleeding. The vital signs are T 97.8 F, P 100, R 16, B/P 122/75, and O2 sat 98%.

<p>Nursing Diagnosis 1 Pain related to contractions as evidenced by preterm labor</p>	<p>Nursing Diagnosis 2 Fatigue related to frequent contractions as evidenced by preterm labor</p>	<p>Nursing Diagnosis 3 Deficient knowledge related to first pregnancy as evidenced by breastfeeding concerns</p>
<p>Rationale for the Nursing Diagnosis The patient is experiencing an increase in the strength and frequency of contractions. The patient states she has trouble relaxing</p>	<p>Rationale for the Nursing Diagnosis The patient started feeling nauseated as the contractions started increasing in frequency and strength</p>	<p>Rationale for the Nursing Diagnosis The patient had planned to take prenatal classes through the hospital but did not start them. She was thinking about breastfeeding but doesn't know anything about how to breastfeed babies</p>
<p>Interventions Intervention 1: Promote bedrest with bathroom privileges Rationale: Getting bedrest as much as possible helps lessen the pain exhibited from the contractions (Ricci et al., 2021)</p>	<p>Interventions Intervention 1: Give the patient ondansetron 4 mg oral disintegrating tablet once per day Rationale: The medication helps to reduce nausea and vomiting. Since the patient is feeling nauseas from the contractions, the medication will help to</p>	<p>Interventions Intervention 1: The patient can be given a brochure that includes all the necessary information for breastfeeding Rationale: Providing visual information on breastfeeding helps to understand information</p>

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<p>Intervention 2: Instruct and support client with proper breathing, relaxation, and abdominal lifting Rationale: Breathing and relaxation techniques help to block pain impulses. The abdominal lifting technique works to relieve pain as the patient strokes the top of their stomach without having to press inside (Ricci et al., 2021)</p>	<p>relieve the symptoms (Ricci et al., 2021) Intervention 2: Place the patient in a comfortable position during the labor process Rationale: Sitting in a specific position helps with muscle relaxation. Squatting or sitting on a rocking chair are all recommended positions. The positions help to induce rest (Ricci et al., 2021)</p>	<p>more thoroughly. Creating a mental representation will allow the patient to make less mistakes (Ricci et al., 2021) Intervention 2: Evaluate the patients basic understanding and their expectations about pregnancy, labor, and delivery Rationale: It helps to make an informed decision about their care. It allows healthcare professionals to educate patients according to their preferences. Understanding what acceptable and not acceptable helps develop a better understanding on the dos and don'ts of breastfeeding (Ricci et al., 2021)</p>
<p>Evaluation of Interventions The patient was very understanding of the process. The patient agreed to be on bed rest as much as possible. The abdominal lifting technique was demonstrated to the patient. The patient understood that they had to stroke their stomach in the correct manner</p>	<p>Evaluation of Interventions The patient did well during the explanation process. The patient did their best to maintain a comfortable position. If the position was not comfortable, alternative strategies were demonstrated</p>	<p>Evaluation of Interventions The patient was understanding. They agreed to be educated on breastfeeding. They are aware that they needed to ask questions if they confused on a specific topic. The patient will need to explain what they learned throughout the whole process</p>

References (3):

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

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2018). *Mosby's diagnostic and laboratory test reference* (14th ed.). Mosby.

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

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