N432 Labor and Delivery Concept map template

Medications

calcium carbonate (TUMS) chewable tablet 1,000 mg Oral q8h PRN

Therapeutic class: Antacid

Pharmacological class: Calcium supplement, antacid

The client is taking calcium carbonate for heartburn relief related to pregnancy.

Key assessments: Assess for abdominal pain, heartburn, indigestion before, after administration (Skidmore-Roth, 2022).

dinoprostone (CERVIDIL) vaginal insert 10 mg ONCE

Therapeutic class: cervical ripening agent

Pharmacological class: Oxytocics, prostaglandin E2

The client is taking this medication for labor induction.

Key assessments: Monitor for allergic reactions. Be alert for signs of uterine rupture. Assess blood pressure. Assess cervical status, baseline uterine and fetal heart monitoring (Skidmore-Roth, 2022)

methylergonovine (METHERGINE) 200 mcg IM q2h PRN

Therapeutic class: Oxytocic

Pharmacological class: Ergot alkaloid

The client is prescribed prophylactically for treatment of postpartum hemorrhage caused by uterine atony due to delayed labor progression.

Key assessments: Assess BP, assess HR, ECG, and heart sounds (report any rhythm disturbances), assess dizziness that affects gait, assess any abdominal or pelvic pain (Skidmore-Roth, 2022).

miSOPROStol (CYTOTEC) tablet 1,000 mcg

Rectal once PRN 10/18

Therapeutic class: Cervical ripening agent

Demographic Data

Admitting diagnosis: Encounter for planned induction of labor

Secondary diagnosis: Diet controlled GDM in the 3rd trimester

Age of client: 35

Weight in kgs: 78 kg

Allergies: Penicillins, aspirin, coconut, strawberries

Date of admission: 10/18/2022

Presentation to Labor and Delivery

The patient is a 35-year-old multiparous woman. The patient arrived at OSF HMMC labor and delivery via shuttle for planned labor induction. The patient denied contractions, vaginal bleeding, and leakage of fluids upon arrival. The patient also denied any signs or symptoms prior to arriving at OSF HMMC. The patient reports normal fetal movement.

Electronic Fetal Heart Monitoring:

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Stages of Labor

Stage 1

Signs and symptoms the client is in the first stage of delivery are being dilated 2-5 cm, with 50% effacement experiencing contractions of mild intensity.

The client is afebrile with a temperature of 3

Prenatal & Current Lab Values/Diagnostics

HCT 35.3% (Normal range: 36-47.0)
Pregnancy causes slightly lower values because of hemodilution (Pagana et al., 2022)
RBC 3.7 (Normal range 3.8-5.3)
RBC decrease in client due to normal fluid increase in pregnancy leading to dilution of RBCs (Pagana et al., 2022).
Hgb 11.7 (Normal range 12-15.8)
Slight decrease is normal in pregnancy due to expanded blood volume (Pagana et al., 2022).

Medical History

Prenatal History: G4T2P0A1L2, 1 SAB 2011 D&C Unknown gestation, 2 Term 2014 & 2016

Previous Medical History: Abnormal pap smear, thyroid disease in pregnancy, HSV2 seropositive

Surgical History: D&C after SAB 2011

Family History: Father: pancreatic cancer, seizures
                    Mother: hypertension
                    Brother: Prostate cancer

Social History: Everyday smoker (3-5 times daily), never smokeless tobacco, marijuana smoker (daily), currently no alcohol, alcohol preconception 2-3 times per week

Active Orders
acetaminophen (TYLENOL) tablet 650 mg Oral q4h PRN Relief of labor pains without adverse effects to mom or fetus.

Lactated Ringer's continuous infusion 100 ml/hr Prevents dehydration during labor (Ricci et al., 2021).

20G IV Left wrist Fluids and medications

General diet The patient has no dietary restrictions.

Electronic Fetal Monitor Monitors fetal well-being and labor progression (Ricci et al., 2021).

et al., 2021). The client has been in the during contractions. Pain during the first stage of labor is primarily a result of the tention of these structures during contractions. Assessment findings that indicate the client is progressing to the second labor stage are the pelvic and perineal phases. The fetus descends, and active pushing begins. In the second stage of labor, the client will be 10 cm dilated, with contraction frequency every 2-3 minutes or less lasting 60-90 seconds, have strong contraction intensity, and have a strong urge to push (Ricci et al., 2021). The client is multiparous, with two previous births delivered at term in 2014 and 2016.

The client's fetal monitoring strip was steady throughout the shift, with the fetal heart rate baseline at 145 BPM. There were some irregularities with the removal of the monitor during mealtimes. The readings returned to normal once the nurse placed the monitor back on the client. Typical nursing interventions and treatments during the first stage of labor include the patient's history, including finding the estimated delivery date (EDD) and determining fetal risk status. The client's EDD is October 21, 2022. The nurse also checks fetal heart rate (FHR), interprets fetal monitor strips, and performs Leopold maneuvers to determine fetal position, lie, and presentation. Other treatment for the client may include comforting the client throughout labor and assessing the client's support system and coping status frequently. The nurse conducts an

assessment every 30 minutes. Due to the elective labor induction, there is a cascade of related interventions, including confinement to bed, pharmacologic labor-stimulating agents, an IV line, and continuous electronic fetal monitoring (Ricci et al., 2021). The patient has received Pitocin, misoprostol, and dinoprostone. Misoprostol (Cytotec) was administered when the patient was admitted on 10/18 at 09:51. Pitocin was started on 10/19 at 03:00. Dinoprostone (Cervidil) was administered on 10/19 at 12:12.

The student shadowed the nurse she was assigned to and observed the nurse document the findings of the electronic fetal monitoring strips every half hour. The charge nurse taught the student how to read the strips. The student also observed a classmate administer an IM injection in the anterolateral thigh.

Stage 2 The patient has not progressed from the latent phase of the first stage of labor.

Stage 3 The patient has not progressed from the latent phase of the first stage of labor.

Nursing Diagnosis 1	Nursing Diagnosis 2	Nursing Diagnosis 3
Risk for infection related to delayed labor progression as evidenced by over 14 hours in stage 1 of labor (Doenges et al., 2019).	**Risk for maternal injury related to induction procedure risk factors: failure to progress as evidenced by possible adverse effects of cervical ripening agents (Ricci et al., 2021).**	**Ineffective childbearing process related to inadequate social support as evidenced by absence of a support person (Ricci et al., 2021).**
Rationale for the Nursing Diagnosis Prolonged labor with an extended latent phase increases the risk of infection, maternal exhaustion, hemorrhage due to uterine atony, and places the fetus at greater risk for oxygen deprivation and injury (Ricci et al., 2021).	**Rationale for the Nursing Diagnosis** The client has not progressed from the latent phase of stage 1 of labor for over 14 hours. The client is 2.5 cm dilated, 50% effaced, and fetal station -3.	**Rationale for the Nursing Diagnosis** Failure to utilize social support (Doenges et al., 2019).
the Interventions	**Interventions**	**Interventions**

Intervention 1: Minimize vaginal examinations. **Rationale:** Frequent vaginal exams during prolonged labor allows time for bacteria to multiply and increases potential exposure to microorganisms or trauma (Ricci et al., 2021). **Intervention 2: Reinforce measures for maintaining good perineal hygiene** (Ricci et al., 2021)**.** **Rationale:** Maintaining good hand and perineal hygiene reduces risk of exposing pathogens in the area (Ricci et al., 2021)**.**	**Intervention 1: Monitor fetal heart rate via EFM during induction and continuously observe the FHR response to titrated medication rate (Ricci et al., 2021).** **Rationale:** This will ensure fetal safety and enable prompt detection of negative effects (Ricci et al., 2021)**.** **Intervention 2: Provide the client with frequent reassurance of maternal and fetal status (Ricci et al., 2021).** **Rationale:** This action will minimize anxiety (Ricci et al., 2021)**.**	**Intervention 1: Ascertain the client's commitments to work, family, and self; and use supportive resources (Doenges et al., 2019).** **Rationale:** Helps the client set realistic priorities to assist the client in making adjustments (Doenges et al., 2019). **Intervention 2: Demonstrate behaviors and techniques to reduce stress and alleviate pain.** **Rationale:** These techniques will assist the patient in alleviating pain and reduce stress in the absence of a support person.
Evaluation of Interventions The client understands the importance of infection prevention. The client always washes hands thoroughly before and after eating, using the bathroom, or touching the perineal area (Ricci et al., 2021).	**Evaluation of Interventions** The client will understand the need for an electronic fetal monitor and cooperate with the placement of the monitor and report any changes.	**Evaluation of Interventions** The client will demonstrate techniques such as breathing, focused imagery, music, other distractions, repositioning to reduce stress and alleviate pain (Doenges et al., 2019).

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References (3):

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