N432 Labor and Delivery Concept map template

Medications

Oxytocin in 0.9% sodium chloride 30 unit/50mL
Pharmacological Classification: oxytocic hormones (Jones & Bartlett Learning, 2022)
Therapeutic Classification: oxytocic hormones (Jones & Bartlett Learning, 2022)
WHY: stimulate uterine contractions (Jones & Bartlett Learning, 2022)
KNA: assess FHR and assess contraction patterns (Jones & Bartlett Learning, 2022)
Ropivacaine 0.2% infusion (nerve block/epidural)
Pharmacological Classification: amide-type local anesthetic (Jones & Bartlett Learning, 2022)
Therapeutic Classification: amide-type local anesthetic (Jones & Bartlett Learning, 2022)
WHY: to cause numbness or loss of feeling before laboring (Jones & Bartlett Learning, 2022)
KNA: assess HR and be alert for new seizures (Jones & Bartlett Learning, 2022)
Ondansetron HCL (PF) injection 4mg
Pharmacological Classification: 5-HT3 receptor antagonist (Jones & Bartlett Learning, 2022)
Therapeutic Classification: 5-HT3 receptor antagonist (Jones & Bartlett Learning, 2022)
WHY: to help treat nausea and vomiting (Jones & Bartlett Learning, 2022)
KNA: assess for dizziness and monitor EKG/K+/Mag levels (Jones & Bartlett Learning, 2022)
Acetaminophen tablet
Pharmacological Classification: analgesics/antipyretics (Jones & Bartlett Learning, 2022)
Therapeutic Classification: analgesics/antipyretics (Jones & Bartlett Learning, 2022)
WHY: alleviate some pain (Jones & Bartlett Learning, 2022)
KNA: assess allergies and assess pain level (Jones & Bartlett Learning, 2022)
ROPivacaine (PF) (Navopin) 5mg/mL ().5%) injection 25 mg
Pharmacological Classification: amino amide local anesthetic (Jones & Bartlett Learning, 2022)
Therapeutic Classification: amino amide local anesthetic (Jones & Bartlett Learning, 2022)
WHY: to cause numbness or loss of feeling before laboring (Jones & Bartlett Learning, 2022)
KNA: assess HR and be alert for new seizures (Jones & Bartlett Learning, 2022)

Demographic Data

Admitting diagnosis: cervidil

Secondary diagnosis: post-term pregnancy (40-42w gestation)

Age of client: 34 years old
Weight in kgs: 77.6 kg

Allergies: NKA

Date of admission: 6/26/23

Support person present: husband

Presentation to Labor and Delivery

The patient is a 34-year-old female G1P0000 at 40w1d gestation being admitted for induction of labor. The patient labored for 9hrand 5 min. Patient denies HA, vision changes, scotomata, RUQ pain, and feeling ill. Patient is a primip, denies previous hs of shoulder dystocia, PPH, and hx of blood transfusion. The patient did receive an epidural and has been tolerating the contractions and pain well.

Electronic Fetal Heart Monitoring:

Baseline EFH: 7 am: 130
1205 pm: 140
Variability: 7 am: moderate
1205pm: moderate
Accelerations: 7 am: no accel
1205pm: no accel
Decelerations: 7 am: no decel
1205pm: yes decel
Contractions:
-frequency: 7 am: 4-5 minutes
1205pm: 2-3 minutes
-length: 7 am: 80 seconds
1205pm: 6-80 seconds
-strength: 7 am: moderate
1205pm: intense/strong
-patient's response:
7am: tolerating
1205: delivery of baby

Medical History

Prenatal History: G1P0000

Previous Medical History: no pertinent previous medical hx

Surgical History: appendectomy (2010)

Family History: no pertinent family hx in mother or father

Social History: no uses of alcohol, drugs, or tobacco

Prenatal & Current Lab Values/Diagnostics

Blood Type: O positive
GBS: negative
Hep B: non-reactive
3rd trimester HIV: non-reactive
Rubella: immune
RPR: non-reactive

No current pertinent lab values/diagnostics

Active Orders

Strict I/Os:
WHY: ensure adequate fluid output, monitor for edema and urinary problems
Q4 vital signs:
WHY: may detect changes, so the appropriate steps can be taken to treat the underlying problem
External fetal monitoring
WHY: Standard OB protocol and can help detect changes in the normal heart rate patten during labor
Diet: clear liquid
WHY: prevent complications from aspiration of stomach contents into the lungs if a c-section delivery becomes necessary
Temp Q2 hours
WHY: can be a sign of infection for some women and can result in unnecessary fetal sepsis

Stages of Labor
Stage 1 This patient is a 34-year-old female. This patient is in post-term labor and is a G1T0P0A0L1. The patient came to the hospital on 6/26/23 for an induction of labor. The first stage of labor started at 0300 on 6/27/23 and lasted for nine hours and five minutes. The first stage of labor occurs when the patient begins to feel persistent contractions (start of labor) to complete cervical dilation. During this stage it is important for the nurses to keep track of maternal and fetal vital signs. The patient had an epidural done to help ease the pain of the contractions and allow her to get some rest. At 1205 on 6/27/23 the patient was fully dilated at 10 cm.
Stage 2 This stage is defined as when the patient is at complete cervical dilation to the delivery of the baby. Patient was fully dilated at 1205 on 6/27/23. Patient began pushing at 1205. It is important during this stage that the nurses are monitoring the fetus's response to labor by checking the FHR. They also want to be monitoring the contractions frequency, duration, and intensity. The patient would push for 10 seconds at a time and would do this three times between contractions. Patient was on her back and the father of the baby was present while she was pushing. The patient did not seem to be in any distress at this time. Delivery of the baby happened at 1319 on 6/27/23. The second stage of labor started at 1205 on 6/27/23 and last for one hour and fourteen minutes until the baby came at 1319 on 6/27/23.

Stage 3

The third stage of labor started at 1319 on 6/27/23 until the delivery of the placenta at 1323 on 6/27/23. This stage is defined as from the time of delivery of the baby and the delivery of the placenta. Delivery of the baby happened at 1319 on 6/27/23. The baby came out headfirst. Baby went straight to mother after birth to get skin on skin contact. Placenta was delivered at 1323. Father of the baby cut the umbilical cord. After delivery of both the baby and the placenta is complete the nurses should sit the mother up in a comfortable position, apply ice to the perineum, and explain to the mother what other assessments may come. The third stage lasted four minutes.

Nursing Diagnosis 1 Risk for impaired fetal gas exchange related to altered blood flow to the placenta or through the umbilical cord (prolapse) as evidence by umbilical cord around neck and foot.	**Nursing Diagnosis 2** Risk for infection related to rupture of membranes and umbilical prolapse as evidence by presence of amniotic fluid.	**Nursing Diagnosis 3** Acute pain related to muscle contractions as evidence by verbalization of pain.
Rationale for the Nursing Diagnosis Inadequate oxygen perfusion is a priority because the gas exchange directly affects oxygenation. Monitoring for worsening gas exchange to prevent the risk of respiratory failure (Capriotti, 2020).	**Rationale for the Nursing Diagnosis** The risk increases due to the ability of pathogens to invade after the rupture of amniotic membranes. This can occur after giving birth and spread throughout the body (Capriotti, 2020).	**Rationale for the Nursing Diagnosis** Labor and delivery is an extremely painful process. The duration and intensity vary for everyone. The muscle contractions in the uterus and the pressure on the cervix cause intense pain (Capriotti, 2020).
Interventions **Intervention 1:** Assess reactions of FHR on EFHM **Rationale:** Proper assessment is needed to avoid hypoxia. The danger of hyperstimulation is that a fetus needs 60 to 90 seconds between contractions to receive adequate oxygenation from placenta	**Interventions** **Intervention 1:** Limit vaginal exams and utilize aseptic technique during invasive procedures **Rationale:** Repeated vaginal examinations increase the risk of introducing pathogens into the vagina and birth canal. The use of aseptic technique will	**Interventions** **Intervention 1:** Epidural **Rationale:** This relieves pain; promotes relaxation and coping with contractions, allowing the client to remain focused on labor work (Phelps, 2020). **Intervention 2:** Simple breathing techniques

blood vessels (Phelps, 2020). **Intervention 2:** Place the client in positions that favors placental perfusion **Rationale:** The main risk of a prolapsed cord is to the fetus. When a prolapsed cord occurs, the first action is to displace the fetus upward to stop compression against the pelvis (Phelps, 2020).	help in preventing and limiting the growth of bacteria (Phelps, 2020). **Intervention 2:** Administer oxytocin as prescribed **Rationale:** Oxytocin is a natural hormone used to induce labor by causing the uterus to contract. The longer it takes for the baby to come out, the more susceptible the mother and the baby are to infections (Phelps, 2020).	**Rationale:** Encourages relaxation and gives the client a means of coping with and controlling the level of discomfort (Phelps, 2020).
Evaluation of Interventions The fetus will display FHR WDL, free of late decelerations on EFHM	**Evaluation of Interventions** Patient will verbalize s/s of infection and will demonstrate keeping their environment clean, safe, and aseptic.	**Evaluation of Interventions** Assess patient's pain level using numeric pain scale and pain will verbalize a decrease in pain,

References (3):

Capriotti, T. M. (2020). Davis Advantage for Pathophysiology Introductory Concepts and Clinical Perspectives. [FADavis].

Jones & Bartlett Learning, LLC. (2022*). 2022 Nurse's Drug Handbook* (20th ed.).

Phelps, L. L. (2020). *In Spark's & Taylor's Nursing Diagnosis Reference Manual 11th ed. Essay*. Wolters Kluwer.