N432 Labor and Delivery Concept Map

Medications

Name	Class: Pharmacologic (**P**) and Therapeutic (**T**)	Dose	Route	Frequency	Reason	Nursing Assessments
Acetaminophen	**P**: Nonsalicylate, 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)
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	4-12 mU/min	PO	Continuous IV drip	Stimulates uterine contraction	Monitor for contraction tate and strength and orthostatic hypotension

(Jones & Bartlett Learning, 2023).

Demographic Data

Admitting diagnosis: Preeclampsia

Secondary diagnosis: scheduled induction

Age of client: 30 years

Weight in kgs: 91.6 kg

Allergies: Codeine

Date of admission: 07/18/2023

Support person present: Partner and Mother

Presentation to Labor and Delivery

This patient presented to Carle complaining of hypertension at 0115 on the same day she was scheduled for induction of labor (07/18/2023). The patient stated she had blood pressures in the 160s/100s, so she decided to come in early. The mother entered Carle OB without consistent contractions, bleeding, ROM, or any symptoms other than her high blood pressure. Once the mother was comfortable at Carle, her blood pressure came down, and they began inducing labor with oxytocin around 0300. The patient began the first stage of labor at this time.

Electronic Fetal Heart Monitoring:

Baseline EFH: 131bpm to 135bpm

Variability: 5-25bpm (moderate)

Accelerations: Absent

Decelerations: Early decelerations were present

Contractions:

-frequency 3-5 minutes progressed to 2 minutes

-length 90 seconds at 0755 and 60 seconds at 9:14

-strength Mild → Strong

-patient's response "Not crazy pain, but I can definitely feel them more now." To "I think I'm ready to have this baby NOW!"

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Stages of Labor

Prenatal & Current Lab Values/Diagnostics

Lab/Test (unit)	Expected Range	Today's Value and Rationale
Vaginal Exam(s)	Dependant	4 cm dilated @ 0816 and 6 cm dilated @ 0920 (no other vaginal exams were performed for this pt. due to the patient's confidence in her timeline).
CO2	22-29	16 This is likely due to increased breathing and breathing techniques associated with pregnancy and anticipation. Hyperventilation can lead to decreased CO2 values (Ricci et al., 2021).
WBC	4-11	15.31 This is very common in pregnancy. Pregnancy comes with an inflammatory response in the mother, leading to an increased white blood cell count (Ricci et al., 2021).
Alk Phos	40-150	213 This could be associated with her preeclampsia as increased alk phos is often associated with preeclampsia in pregnancy (Ricci et al., 2021).
Albumin	3.5-5.0	2.8 This value could be consistent with her preeclampsia. This is also consistent with how pregnancy progresses, lading to an increased plasma volume therefor lowering the albumin concentration in the blood. (Ricci et al., 2021).

Normal ranges obtained from Carle Foundation Hospital (2023). Theis is a list of the pertinent labs for this patient and is not a comprehensive list.

Medical History

Prenatal History: **G**3-**T**0-**P**3-**A**0-**L**3 (after delivery)
Prior vaginal delivery at 37w0d with SROM at 0330; Began prenatal care at approximately 14 weeks after suspecting pregnancy at 6 weeks; Pt. attended all scheduled prenatal visits; Weekly prenatal visits starting at 34 weeks; Valtrex 500mg BID given at 35 weeks; Pt. noted as a moderate hemorrhage risk due to her 1000 mL blood loss with her first pregnancy; GBS-neg; HepB-neg; HIV-neg; Previous two children are living and healthy.

Previous Medical History: ADHD; mood disorder; gestational hypertension

Surgical History: Bilateral breast enhancement (2014)

Family History: Father – None; Mother – None; Grandparents – None; Siblings – (sister is autistic)

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

Active Orders

Avoid supine positioning – Decelerations.

EFM and Toco – Monitor fetal status.

Indwelling Foley catheter – Maintain drainage of urine.

Strict I&O – Risk for HTN and hemorrhage

Reposition from side-to-side Q30min – Encourage progress of labor.

Fundal Checks postpartum

Vital signs Q4H; **BP Q30min**; **Temp Q2H**

...se or provider in centimeters via vaginal ...na. This continues until the cervix has ...

... increased amount of time, the mother is at an increased risk of lacerations and hemorrhage (this happened during the mother's first pregnancy). The second stage of labor lasted only three minutes for this patient. Once the fetus has descended far enough that its head no longer disappears from the vaginal opening between contractions, it is said to be crowning (Ricci et al., 2021).

The nurse performed just two vaginal examinations, which revealed the patient was at four and six centimeters dilated. The nurse and the patient trusted each other to know when to push. The vagina was not examined to record a 10 cm dilation for this patient as the healthcare team took a more hands-off approach. After the second examination, the second stage escalated quickly. The healthcare team observed uterine contractions with early decelerations on the monitor and instructed the mother to push with the next contraction. She could push for the entirety of this contraction, and crowning occurred afterward. With the first push of the following contraction, the fetus was delivered on 07/18 at 0952. The newborn had no complications during this labor, though the mother suffered bilateral periurethral tears, which received successful repair. If this tear were not properly repaired, it would increase the risk of infection and hemorrhage.

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 decrease significantly in size. This causes the placenta to separate from the wall of the uterus. 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 when this occurs (Ricci et al., 2021). During placental expulsion, the continuous contractions of the uterus aid in the birth of the placenta, which may take two to thirty minutes (3 minutes for this patient). 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 been fully delivered, it will be inspected by the provider. The fundal massage will aid in vasoconstriction within the uterus, minimizing blood loss. A vaginal birth may contribute to a blood loss of about 500 mL, considered normal until over 1000 mL. 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 was not the case for this patient, who had an IUD placed immediately following delivery. This allowed the provider to feel any leftover fragments. This patient delivered a fully intact placenta with no retained fragments, which occurred approximately three minutes after the newborn's birth. Her uterus assumed a more globular position and was firm without apparent issue.

Nursing Diagnosis 1 Impaired skin integrity related to labor complication as evidenced by skin laceration	**Nursing Diagnosis 2** Functional urinary incontinence related to weakened supporting pelvic structure as evidenced by recently giving birth and periurethral fissures.	**Nursing Diagnosis 3** Risk for bleeding related to postpartum complication
Rationale for the Nursing Diagnosis The mother suffered bilateral periurethral fissures	**Rationale for the Nursing Diagnosis** This patient has just given birth, and this can be very traumatic to the tissues of the pelvic region. The combination of trauma and fissure near her urethra could lead to the patient struggling with incontinence until her tissue heals.	**Rationale for the Nursing Diagnosis** The mothered suffered bilateral periurethral fissures due to the vaginal birth, and the patient has a history of HTN
Interventions **Intervention 1:** Educate patient to avoid scratching the area, as this may worsen the effected area and introduce pathogens to the wounded area. **Rationale:** This will help mitigate infection risk and promote wound healing	**Interventions** **Intervention 1:** Discuss the possibility of experiencing increased incontinence with the patient. **Rationale:** This helps prepare the patient for what to expect given her injuries.	**Interventions** **Intervention 1:** Continuously monitor vital signs **Rationale:** This would help assess for the effects of blood loss and would point toward any non-obvious bleeding through changes in blood pressure and heart rate.

Intervention 2: Apply ice packs and antipruritic spray to the area, reducing swelling, pain, and itching of the site. **Rationale:** This will decrease pain/itching to the site.	**Intervention 2:** **P**rovide assistance and timing with using the restroom. **Rationale:** This enhances regularity and gives the patient an understanding of how frequently she might need to get up and use the restroom.	**Intervention 2:** Assess the wound healing at least once per shift. **Rationale:** This will help ensure the wound is not reopening and potentially bleeding.
Evaluation of Interventions This patient stated that the antipruritic spray seemed to ease the itching and made the affected area feel more comfortable. She agreed to avoid scratching the wound and hopes it will promote healing. The patient is aware that these fissures may cause burning with urination.	**Evaluation of Interventions** This patient understood the teaching and the increased likelihood of incontinence. She agreed and mentioned that her partner has been helping her get up to use the restroom. She is also aware that it might take longer for her to regain her control since she experiences bilateral periurethral fissures.	**Evaluation of Interventions** The patient responded positively 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. The patient is aware that these fissures may cause burning with urination.

(Phelps, 2020).

References

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