

## N432 Labor and Delivery Concept map template

### Medications

- Famotidine; Dose:** 20mg **Route:** Oral **Frequency:** Q12 hr  
**Pharmacological class:** Histamine-2 blocker  
**Therapeutic Class:** Antiulcer agent  
Patient is taking to treat heartburn and indigestion  
**Key Nursing assessment:** vital signs as arrhythmias are an adverse effect (Jones & Bartlett Learning, 2019).
- Misoprostol; Dose:** 50 mcg **Route:** Oral **Frequency:** Q6 hr  
**Pharmacological class:** Prostaglandin E1 analogue  
**Therapeutic class:** Antiulcer  
Patient is taking for induction of labor  
**Key Nursing Assessment:** Monitor fetal heart rate (Jones & Bartlett Learning, 2019).
- Oxytocin; Dose:** 2 ml/hr **Route:** IV **Frequency:** Continuous  
**Pharmacological class:** Uterine Stimulant, oxytocic  
**Therapeutic class:** N/A  
Patient is taking for induction of labor  
**Key Nursing Assessment:** Fetal heart rate pattern and frequency and duration of uterine contractions (Jones & Bartlett Learning, 2019).
- Acetaminophen; Dose:** 500mg **Route:** Oral **Frequency:** Q4hr PRN  
**Pharmacological class:** Nonsalicylate, paraminophenol derivative  
**Therapeutic class:** Antipyretic, non-opioid analgesic  
Patient is taking to help manage pain  
**Key Nursing Assessment:** Pain level and vital signs (Jones & Bartlett Learning, 2019).
- Calcium Carbonate; Dose:** 500mg **Route:** Oral **Frequency:** PRN  
**Pharmacological class:** Calcium Salts  
**Therapeutic Class:** Antacid, antihypermagnesmic, calcium replacement  
Patient is taking to help with indigestion  
**Key Nursing Assessment:** Monitor blood pressure, do not administer if blood pressure is low (Jones & Bartlett Learning, 2019).

### Demographic Data

**Admitting diagnosis:** Induction of Labor

**Secondary diagnosis:** N/A

**Age of client:** 27 years old

**Weight in kgs:** 95.2 kg

**Allergies:** N/A

**Date of admission:** 7-12-23

**Support person present:** Husband

### Presentation to Labor and Delivery

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

**Baseline EFH:**

**Beginning;** Normal

**End;** Normal

**Variability:**

**Beginning;** Moderate 6-25 bpm

**End;** Moderate 6-25 bpm

**Accelerations:**

**Beginning;** Present

**End;** Absent

**Decelerations:**

**Beginning;** N/A

**End;** Present

**Contractions: Beginning, End**

-**frequency;** 6-8, 1-23

-**length;** 95-100, 50-110

-**strength;** Mild by palpation

-**patient's response;** tolerating well

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K.E is a 27-year-old Caucasian female who presented to the hospital on 7/10/23 at 41 weeks 6 days gestation for a scheduled induction of labor.

### Prenatal & Current Lab Values/Diagnostics

**WBC; Prenatal;** 10.33  
**Current;** 11.04  
**Range;** 4- 11.00  $10^3$  u/L  
**Abs Neutrophils; Prenatal;** 7.14  
**Current;** 7.93  
**Range;** 1.60-7.70  $10^3$  u/L  
**7/10/23; OB US BPP;**

A viable singleton intrauterine gestation is identified with fetal cardiac activity observed at 134 bpm. A biophysical profile score (BPP) was obtained with a score of 8/8. Fetal breathing movements were noted. The fetus was active and had good tone. A measurable amniotic fluid > 2 cm was observed. The maximum pocket of amniotic fluid measures 3.45 x 2.74 cm. The placental position is; posterior mid, grade 2. Fetal position is cephalic.

### Medical History

**Prenatal History:** G1PO

**Previous Medical History:** N/A

**Surgical History:** N/A

**Family History:** Paternal grandfather; Prostate cancer

Paternal grandmother; melanoma

Mother; diabetes

Maternal grandmother; diabetes

**Social History:** Lives at home with husband

### Active Orders

- Continuous fetal monitoring
- BP and pulse during oxytocin infusion assess with each increase in the infusion rate
  - Toco monitoring
- Call for bedside assessment for IUPC placement by provider
- Maternal assessments every 8 hours
- Temps every 2 hours for patients with ruptured membranes

### Stages of Labor

**Stage 1;** The patient is still currently in the first stage of labor. She is currently dilated 3 centimeters, 70% effaced, and at a -1 station. The first stage of labor begins when labor starts and ends when the cervix is fully dilated to 10 centimeters (Hutchison et al, 2023). Labor can begin spontaneously or can be induced due to a variety of maternal or fetal indications (Hutchison et al, 2023). Methods of inducing labor include cervical ripening with the use of prostaglandins, membrane sweeps, amniotomy, and the use of intravenous oxytocin (Hutchison et al, 2023). The first stage of labor is further divided into two subcategories or phases which are defined by the degree of cervical dilation. The latent phase is most commonly known as when the mother is only 0 to 6 centimeters dilated, whereas the active phase occurs from 6 centimeters to full cervical dilation (Hutchison et al, 2023).

**Stage 2;** The patient has not reached this stage of labor yet. The second stage of labor occurs when the cervix is completely dilated and the baby has been delivered (Hutchison et al, 2023). Several things can have an effect on the duration of the second stage of labor such as fetal size and position, or maternal factors such as pelvis shape, the magnitude of expulsive efforts, comorbidities such as hypertension or diabetes, age, and history of previous deliveries (Hutchison et al, 2023).

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**Stage 3;** The third stage of labor takes place when the fetus is delivered and ends with the delivery of the placenta (Hutchison et al, 2023). The separation of the placenta from the uterine wall is typically seen by three signs such as a gush of blood from the vagina, lengthening of the umbilical cord, and a globular shaped uterine fundus upon palpation (Hutchison et al, 2023).

Nursing Diagnosis 1	Nursing Diagnosis 2	Nursing Diagnosis 3
<p><b>Rationale for the Nursing Diagnosis</b></p> <p>Risk for ineffective coping related to a lack of sleep and anxiety as evidenced by being in labor for the past 2 days with little to no progression.</p>	<p><b>Rationale for the Nursing Diagnosis</b></p> <p>Acute pain related to cervical dilation and contractions as evidenced by the verbalization of pain</p>	<p><b>Rationale for the Nursing Diagnosis</b></p> <p>Fatigue related to lack of sleep and increased pain as evidenced by a prolonged induction of labor</p>
<p><b>Interventions</b></p> <p><b>Intervention 1:</b> Reinforce breathing and relaxation techniques during contractions  <b>Rationale:</b> These practices will help minimize anxiety and provide a distraction (Martin, 2023).</p>	<p><b>Interventions</b></p> <p><b>Intervention 1:</b> Assist with comfort measures  <b>Rationale:</b> One of the most effective non-pharmacological methods of reducing pain is a massage. Comfort measures can include back rubs,</p>	<p><b>Interventions</b></p> <p><b>Intervention 1:</b> Administer an analgesic  <b>Rationale:</b> the use of an analgesic can help the patient cope with her contractions and help with relaxation between contractions (Martin, 2023).</p>

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<p><b>Intervention 2:</b> Provide a calm peaceful environment  <b>Rationale:</b> Darkening the room and decreasing noise and stimulation often allows for the laboring mother to relax which helps labor be effective and progress (Martin, 2023).</p>	<p>repositioning, or linen changes (Martin, 2023).  <b>Intervention 2:</b> Elevate head 30 degrees and alternate position  <b>Rationale:</b> Position changes help to facilitate comfort for the laboring mother but also assist the fetus in adapting to the size and shape of the patient's pelvis, the elevation of the head of bed helps to prevent respiratory depression (Martin, 2023).</p>	<p><b>Intervention 2:</b> Plan care to limit interruptions and promote rest  <b>Rationale:</b> this allows for maximized opportunity for the patient to rest, the nurse could come in for her routine assessments but try to minimize going back into the room when it is not absolutely needed (Martin, 2023).</p>
<p style="text-align: center;"><b>Evaluation of Interventions</b></p> <p>The patient became more relaxed and used deep breathing techniques throughout her contractions to help her relax and decrease her anxiety.</p>	<p style="text-align: center;"><b>Evaluation of Interventions</b></p> <p>The patient used comfort measures such as back rubs from her husband and changed positions to help with her discomfort.</p>	<p style="text-align: center;"><b>Evaluation of Interventions</b></p> <p>The patient was able to get some rest between contractions with the use of acetaminophen, the nurse tried to help minimize interruptions to the patient when she was trying to rest but provided the patient with her call light for when she needed a nurse.</p>

**References (3):**

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