

Jonathan
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CASE STUDY - INDUCTION OF LABOR

A G3, P2 patient at 41 weeks gestation is admitted for induction of labor. Assessment data reveals: cervix dilated 2 cm, 40% effaced, -2 station, cervix firm, and membranes intact. The patient's last baby was delivered at 40 weeks and weighed 9 pounds. The physician has ordered Prostaglandin administration the evening before Oxytocin in the morning.

1. What is the indication for induction of labor?
Recent recommendations suggest waiting until 40-41 weeks before considering elective induction. So she is right on track for induction. Also she is at a "-2" station & has a history of having a bigger baby. Keeping the baby in the womb could compromise the fetus.
2. Why did the physician order prostaglandins the evening before the induction?
Prostaglandin is used to cause cervical ripening. Pt should remain recumbent for at least 30 minutes.
3. What tests or evaluation should be performed prior to the induction?
 - 1) Nurse should evaluate mom & babies VS
 - 2) Check FHR & kick count
 - 3) Check for cephalic presentation
 - 4) Check BISHOP score
4. What are the nursing considerations when administering an Oxytocin infusion?
 - 1) Should be diluted in an isotonic solution
 - 2) Should be given as 2nd piggy back so it can be stopped quickly
 - 3) Could hyperstimulate the uterus → tachysystole
 - 4) IV - port closest to venipuncture sight
 - 5) Start slowly & titrate up

CASE STUDY - Diabetes in Pregnancy

A 30-year-old, G2, P1, is in her 10th week of pregnancy. Her first baby was stillborn at 32 weeks, so she is very worried about this pregnancy. Initial lab work obtained two weeks ago included testing for diabetes, due to the patient's history a stillborn. The physician explains during the first prenatal visit there is a concern for diabetes due to an elevated glucose level. The nurse realizes patient education regarding diabetes, the effects of diabetes on both the patient and baby and how to manage diabetes it is essential.

1. Discuss maternal risks associated with diabetes and pregnancy.

- 1) Hypertension - preeclampsia
- 2) Development of DHA
- 3) Common ~~at~~ UTI's because of \uparrow BG
- 4) Hydramnios
- 5) Macrosomia
- 6) Large fetal size

2. Discuss fetal-neonatal risks associated with diabetes and pregnancy.

- 1) shoulder dystocia
- 2) Congenital Malformation - neural tube defects
- 3) Variations in fetal size - (hyper / hypo) - glycemia
- 4) Oligohydramnios \rightarrow blood goes to heart & brain instead of the kidneys
- 5) Hyperbilirubinemia
- 6) RDS

3. What educational topics should be covered to assist the patient in managing her diabetes?

Caring & managing diabetes will lower risk of fetus being compromised.

- 1) Eating a healthy diet
- 2) Self monitoring of Blood Glucose Levels
- 3) Monitoring Insulin regimen

4. What classification (SGA, AGA, LGA) will this patient's baby most likely be classified as? Discuss your answer.

Fetal macrosomia results when \uparrow levels of blood glucose stimulate
(LGA)
excessive production of fetal insulin which acts as a powerful
growth hormone.

\uparrow risk for C-section or birth injury from shoulder dystocia.

CASE STUDY - Pregnancy Induced Hypertension

A single 17-year-old patient Gr 1 Pr 0 at 34 weeks gestation comes to the physician's office for her regular prenatal visit. The patient's assessment reveals BP 160/110, DTR's are 3+ with 2 beats clonus, weight gain of 5 pounds, 3+ pitting edema, facial edema, severe headache, blurred vision, and 3+ proteinuria.

Patient's history – single, lives with her parents, attending high school, works at local grocery store in the evenings as a cashier, began prenatal care at 18 weeks, has missed two of her regularly scheduled appointments for prenatal care, never eats breakfast, snacks for lunch and eats dinner after she gets off work at 10:00 pm.

1. What disease process is this patient exhibiting? What in the assessment supports your concern?

Preeclampsia – 1) BP 160/110, 2) 3+ pitting edema, 3) weight gain of 5 lbs.
4) headache, 5) Blurred vision

2. What in the patient's history places her at risk for Pregnancy-Induced Hypertension?

1) 17 year old female. 3) Never eats breakfast 5) minimal prenatal care
2) single & lives w/ parents 4) Poor-irregular diet

3. Describe how Pregnancy-Induced Hypertension affects each organ and how these effects are manifested.

Heart – severe HTN, CHF, Pulmonary Edema Neurological – seizures, stroke, blindness

Pulmonary – edema, hypoxemia

Hepatic – hepatic rupture, coagulation defects

Renal – acute renal failure

4. What will the patient's treatment consist of?

1) Bedrest
2) Magnesium sulfate – anti convulsant
3) Anti-hypertensives

4) corticosteroids for baby

5. What is the drug of choice for this condition? What other medication(s) might be ordered for this patient?

1) Labetalol 3) Nifedipine
2) Hydrochlorothiazide *4) Magnesium sulfate

6. What are the Nursing considerations when administering the drug of choice? (Side effects & medication administration guidelines) Mag Sulfate

1) Monitor BP closely during administration
2) Check RR above 12 bpm
3) Check Deep Tendon Reflexes
4) Urinary output greater than 30ml/hr
5) Ensure you have calcium gluconate

Student Name: Jonathan Paredes

Unit: _____

Pt. Initials: _____

Date: 4/3/23

Maternal Medication Worksheet – Current Medications & PRN for Last 24 Hours

Allergies: _____

Primary IV Fluid and Infusion Rate (ml/hr)	Circle IVF Type	Rationale for IVF	Lab Values to Assess Related to IVF	Contraindications/Complications
	Isotonic/ Hypotonic/ Hypertonic			

Generic Name	Pharmacologic Classification	Therapeutic Reason	Dose, Route & Schedule	Correct Dose? If not, what is correct dose?	IVP – List solution to dilute and rate to push. IVPB – List ml/hr and time to give	Adverse Effects	Appropriate Nursing Assessment, Teaching, Interventions (Precautions/Contraindications, Etc.)
Oxytocin	Uterogenic agent	Used to induce labor, strengthen uterine contractions	0.5-1 millunits/minute	Y N	IVPB – (3-6ml/hr)	Tachysystole -hyperactive uterine contractions	1. Should be diluted → isotonic solution 2. 2ndary Piggy Back 3. Attach to most proximal port 4. Start slowly titrate up
Magnesium Sulfate	Anticonvulsant	Used to treat severe preeclampsia	loading dose 4-6g in 15-20min	Y N	continuous infusion 1-2g/hr	Depressed DJR, flushing, sweating, Respiratory ↓	1. monitor BP 2. Check RR ↑ 12 bpm 3. Check DTR 4. Check urinary output
Meperidine	Opioid (Narcotic Analgesic)	Used to treat moderate-severe pain	10mg 1-5mg per inc. dose	Y N	continuous infusion 15-35mg/hr	Can cause Addiction, overdose, or Death	1. Fall risk 2. Severe constipation - stool softener 3. may cause tremors 4. N/V, & loss of appetite
Promethazine	Antihistamines Phenothiazine antiemetics	To help w/ nausea & vomiting	12.5-25mg Q4hrs PRN	Y N	IVP - 12.5-25mg	EPS symptoms seizures arrhythmias PRN	1. may cause nose bleeding 2. may have uncontrolled movements 3. severe drowsiness 4. fall risk
Calcium Gluconate	Antidote to Magnesium	Minerals & electrolytes	1g in 10mL of 10% solution	Y N	IVP - 1g in 10mL solution of 10% NaCl over 3minutes	Will cause Constipation	1. weakness 2. confusion 3. headache 4. upset stomach

Student Name: Jonathan Paredes

Unit: _____

Pt. Initials: _____

Date: _____

Newborn Medication Worksheet – Current Medications & PRN for Last 24 Hours

Allergies: _____

Primary IV Fluid and Infusion Rate (ml/hr)	Circle IVF Type	Rationale for IVF	Lab Values to Assess Related to IVF	Contraindications/Complications
	Isotonic/ Hypotonic/ Hypertonic			

Generic Name	Pharmacologic Classification	Therapeutic Reason	Dose, Route & Schedule	Correct Dose? If not, what is correct dose?	IVP – List solution to dilute and rate to push. IVPB – List mL/hr and time to give	Adverse Effects	Appropriate Nursing Assessment, Teaching, Interventions (Precautions/Contraindications, Etc.)
Phytonadione	Vitamins Anticoagulation	Treat bleeding or clotting problems	0.5-1mg IM injection	Y N (1 hour) of birth	/	Erythema, pain, hyperbilirubinemia	2. Drug is light sensitive 2. make sure baby has it before circ. 3. Check for bleeding @ inj. site 4. Check for hyperbilirubinemia
Erythromycin Ophthalmic Ointment	Antibiotic Ointment	Prophylaxis against Neisseria gonorrhoeae	1cm long "ribbon" in eye	Y N	/	Burnin, & itching	1. may blur vision 2. Do not rinse 3. Wipe from outer eye after 1min 4. Observe for irritation
Engerix B	Vaccine	Immunization against Hep B infection	10mcg IM	Y N	/	Pain, redness @ site, fever, fatigue, headache	1. Shake vial well before admin 2. give with 12 hrs if mom is infected 3. DO NOT give IV or ID 4. Obtain parental consent before
Hepatitis B Immune Globulin	Immune Globulin	Provides antibodies & passive immunity to Hep B	0.5ml IM	Y N	/	Pain, Urticaria, anaphylaxis	1. Should NOT be given IV 2. give IM anterolateral thigh 3. Begin 12 hours after birth 4. Give opposite side of vaccine
				Y N			1. 2. 3. 4.