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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?
preclampsia - BP, weight gain, facial edema, headache, blurred vision, proteinuria
2. What in the patient's history places her at risk for Pregnancy-Induced Hypertension?
17yr, no prenatal care, unhealthy lifestyle
3. Describe how Pregnancy-Induced Hypertension affects each organ and how these effects are manifested.
Vascular bed - ↑ release of cellular Fibronectin growth factors
Cardiovascular & pulmonary - Arteriolar narrowing, ↑ sympathetic activity
Renal - Slight ↓ in glomerular size
Hepatic - changes consistent w/ hemorrhage into hepatic tissue
4. What will the patient's treatment consist of?
Prevention of seizures, bed rest, fetal monitoring
5. What is the drug of choice for this condition? What other medication(s) might be ordered for this patient?
methyldopa, magnesium sulfate
6. What are the Nursing considerations when administering the drug of choice? (Side effects & medication administration guidelines)
Mag toxicity - loss of DTR, ↓ resp & cardiac output
Confusion, sweating
-IV, diluted

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.

Overweight, GD in previous pregnancy, history of prediabetes, hypertension, UTI, birth injury

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

Macrosomia, hypoglycemia, hypocalcemia, respiratory distress, congenital anomalies

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

nutrition & exercise

Maintain stable blood glucose

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

LGA Fetal excess nutrients transported to fetus

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? The baby is ^(Post term) past due date and probably large
2. Why did the physician order prostaglandins the evening before the induction? to help ripen the cervix
3. What tests or evaluation should be performed prior to the induction? Vital signs
FHR, UA
4. What are the nursing considerations when administering an Oxytocin infusion?
begin 30-60 min after Prostaglandin & 4 hours after Misoprostol,
Begin slowly, increase gradually

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	Vitamin K	Vit K deficiency Prevent Hemorrhage	1mg Subq once	Y		Cardiac arrest Resp arrest	1. BBW Dectn 2. report rash 3. cyanosis 4. Monitor vital signs
Erythromycin Ophthalmic Ointment	Antibiotic	Prophylaxis	once	Y		Burning Redness Stinging	1. 2. 3. 4.
Engenix B	Vaccine	hep B Vaccine	16 mcg / 0.5 ml IM 0.5 ml IM Dilute with 0.9% NaCl once	Y N		Site reaction Diarrhea Malaise	1. review dosing schedule 2. Keep appointment 3. Watch for irritation @ site 4. baby may be fussy
Hepatitis B Immune Globulin	Immune Serum	Prophylaxis	0.5 ml IM once	Y N		Injection site Pain, N/V Myalgia	1. AVOID live vaccines for 3m 2. may still transmit disease 3. report signs of thrombotic 4. event follow up w/ PCP

Student Name: _____ Unit: _____ Pt. Initials: _____ Date: _____

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

Allergies: _____

Primary IV Fluid and Infusion Rate (ml/hr)	Circle IV Type	Rationale for IVF	Lab Values to Assess Related to IVF	Contraindications/Complications
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Oxytocin	Uterine Stimulant	Induce labor	0.5 x 0.1 ml/min IV 30-60 min	Y N	IVPB – List ml/hr and time to give	Nausea, Vomiting, Dysrhythmia	<ol style="list-style-type: none"> 1. BBL not for elective induction 2. Monitor vital signs 3. Monitor urine output 4. Monitor, EHM
Magnesium Sulfate	Anti-inflammatory	Treat tetra	30-150mg PO 4 hours	Y N		Flushing, Hypotension, Shock	<ol style="list-style-type: none"> 1. Monitor vitals 2. monitor reflexes 3. Stop infusion if signs of toxicity 4. Airway management
Meperidine	Opioid	Analgesic	30-150mg PO 4 hours	Y N		IVV, Dizziness, Hypotension	<ol style="list-style-type: none"> 1. BBL addiction 2. respiratory depression 3. Monitor vital signs 4. severe constipation (report)
Promethazine	Antihistamine	Antiemetic		Y N		Pruritus, Dizziness	<ol style="list-style-type: none"> 1. BBL respiratory depression 2. may cause photosensitivity 3. call before getting up 4. report signs of respiratory depression
Calcium Gluconate	Calcium Supplement	Mag Sul toxicity	IV	Y N		Constipation, Hypotension	<ol style="list-style-type: none"> 1. report signs of bradycardia 2. report hypotension 3. monitor VS 4. give slowly