Obstetrics and Gynecology ward

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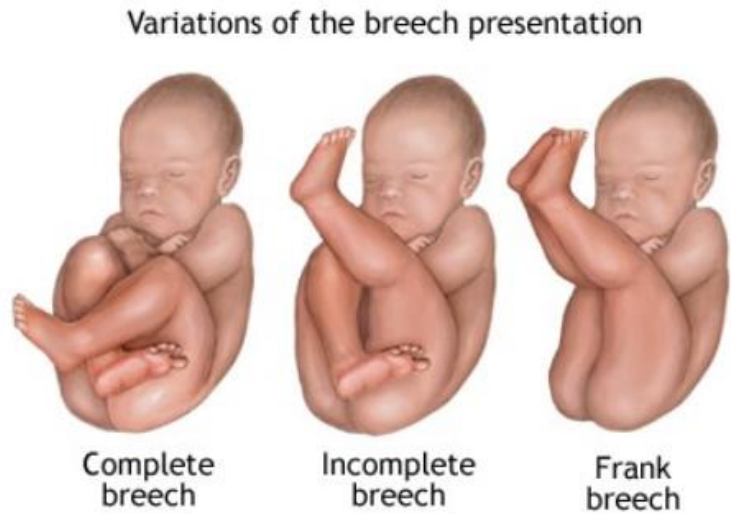
1. **Active labour:** Also known as the first stage of labour.
2. **Amniotic fluid:** Sometimes called liquor (lie-kwa), this is the fluid that surrounds the baby in the uterus (womb).
3. **Amniotic sac:** The bag in which the fetus and amniotic fluid are contained during pregnancy.
4. **Antenatal:** Before the birth.
5. **Antepartum haemorrhage (APH):** Bleeding before the birth.
6. **Breech presentation (BR):** This means your baby is lying bottom or feet down in the uterus.
7. **Caesarean section:** Delivery of an infant through an incision in the abdominal and uterine walls.
8. **Cephalic:** This means the baby is lying with its head in the lower part of the uterus.
9. **Congenital**: Present at birth.
10. **Eclampsia**: A serious complication of pregnancy, characterized by high blood pressure and oedema (swelling), which in its worse form can result in a seizure (fit). It is the more severe



☞ GPA System

What Does G 3 P 2 A 1 Mean?

The abbreviations GPA in GPA System in Pregnancy known as **Gravida**, **Para**, and **Abortion**. In case it is G3 P2 A 1, it signifies three pregnancies. From those three pregnancies two delivered alive and one abortion.

Another example:

Gravidity	Parity	Abortions
G2	P1	A1

- **Expected Date of Delivery**

The estimated due date (EDD or EDC) is the date that spontaneous onset of labor is expected to occur. The due date may be estimated by adding 280 days (9 months and 7 days) to the first day of the last menstrual period (LMP)

Input:

Today's date	Jan	31	2021
First day of last period	Jan	1	2021

Results:

Estimated due date	Oct 8, 2021
Estimated gestational age	4 weeks 2 days

1. Morning Sickness

1. Nausea and vomiting associated with pregnancy
2. Usually during first trimester
3. Usually occurs on rising and diminishes as day progresses
4. Cause: Unknown
5. Hyperemesis gravidarum: Severe nausea and vomiting lead to dehydration and malnutrition.
6. Nonmedical treatment: First line
    a. Eat saltine crackers.
    b. Keep stomach from becoming completely empty.

c. Eat small, dry meals.

d. Avoid spicy and odorous foods.

7. Symptomatic treatment

a. Doxylamine and pyridoxine: dosage 2 tablets orally at bedtime daily. Maximum dosage: One tablet in the morning, one mid-afternoon, and two at bedtime

b. Pyridoxine: Considered first-line treatment after nonpharmacologic treatment.

c. Meclizine

d. Dimenhydrinate

e. Diphenhydramine

f. Ondansetron: Only if nausea and vomiting not controlled with first-line agents; possible increased

risk of a slight increase in cardiac birth defects, mainly septal defects, according to two studies; best to avoid, especially during first 10 weeks of gestation.

g. Metoclopramide – Only if nausea and vomiting not controlled with first-line agents.

h. Phenothiazines – Only if nausea and vomiting not controlled with first-line agents.

Heartburn

- 1. Occurs in latter half of pregnancy.
- 2. Cause: Enlarged uterus puts pressure on stomach, and esophageal sphincter relaxes.
- 3. Nonmedical treatment
  - a. Smaller, more frequent meals
  - b. Avoid food and liquids 3 hours before bed.
  - c. Elevate head of bed with blocks.
- 4. Symptomatic relief
  - a. Antacids
  - i. Magnesium hydroxide
  - ii. Aluminum hydroxide (overuse may lead to neurotoxicity)
  - iii. Calcium carbonate
  - b. Sucralfate: Not absorbed in GI tract.
  - c. Second line: Histamine-2 receptor antagonists, proton pump inhibitors

Constipation

1. Cause: Decreased peristalsis
2. Nonmedical treatment
   a. Increase high-fiber foods.
   b. Increase fluid intake to eight 8-oz glasses of water a day.
   c. Increase exercise.
3. Symptomatic relief
   a. Stool softeners
   b. Bulk laxatives: Not absorbed.
   c. Surfactants
   d. Stimulants: Not recommended as first-line therapy.
   e. Avoid mineral oil: Impairs vitamin K absorption and could cause hypoprothrombinemia.

Hemorrhoids

1. Caused by constipation and increased venous pressure below uterus
2. Correct constipation with stool softeners.
3. Sitz baths
4. External medications preferred.
5. Avoid topical anesthetics and steroids.

Headache

1. Cause: Hormone fluctuations

2. Therapy

a. Rest, ice packs

b. Acetaminophen

3. Drugs to avoid

a. Aspirin and nonsteroidal anti-inflammatory drugs (NSAIDs)

b. Triptans, ergotamine

1. Coagulation Disorders

- 1. Anticoagulation necessary
  - a. History of DVT
  - b. Prosthetic heart valve
  - c. Deficiencies of clotting factors
  - d. Antiphospholipid antibodies
- 2. Therapy
  - a. Avoid warfarin.
  - b. Heparin or low-molecular-weight heparin (monitor for osteoporosis if heparin is used long term)
  - c. Low-molecular-weight heparin preferred to heparin.
  - d. Dosing
  - **i. Prophylactic**
  - (a) Enoxaparin 40 mg subcutaneously daily **(ACOG and ACCP)**
  - (b) Dalteparin 5000 units subcutaneously daily **(ACOG and ACCP)**
  - (c) Tinzaparin 4500 units subcutaneously daily **(ACOG and ACCP)**
  - (d) Heparin 5000–7500 units subcutaneously every 12 hours for first trimester, 7500–10,000 units subcutaneously every 12 hours for second trimester, and 10,000 units subcutaneously every 12 hours for third trimester unless activated partial thromboplastin time (aPTT) is elevated **(ACOG)**

- **Therapeutic**

  - (a) Enoxaparin 1 mg/kg subcutaneously every 12 hours **(ACOG and ACCP)**
  - (b) Dalteparin 200 units/kg subcutaneously daily or 100 units/kg subcutaneously every 12 hours **(ACOG and ACCP)**
  - (c) Tinzaparin 175 units/kg subcutaneously daily (ACOG and ACCP)
  - (d) Heparin 10,000 units subcutaneously every 12 hours with target activated partial thromboplastin time (aPTT) range (1.5–2.5) 6 hours after injection **(ACOG)** or adjusted-dose unfractionated heparin subcutaneously every 12 hours, with mid-interval aPTT target of 2 times the control **(ACCP)**

☞ May consider switching LMWH to heparin at 36 weeks of gestation to permit induction of neuroaxial anesthesia during labor and delivery **(ACOG).**

☞ Prophylaxis with LMWH or UFH should be discontinued 12–24 hours before cesarean section or vaginal delivery.

☞ Therapeutic doses should be discontinued 24–36 hours before cesarean section or vaginal delivery.

☞ Continue anticoagulation for 6 weeks postpartum.

Gestational Diabetes Mellitus (GDM)

- Pregnancy is accompanied by **insulin resistance**, mediated primarily by **placental secretion of diabetogenic hormones** including **growth hormone**, **corticotropin-releasing hormone**, **placental lactogen (chorionic somatomammotropin)**, **prolactin, and progesterone**.

- Among the main consequences of GDM are **increased risks** of **preeclampsia, large for gestational age (LGA) newborns, gestational hypertension , Birth trauma to mother or newborn , Perinatal mortality, Fetal/neonatal hypertrophic cardiomyopathy, Neonatal respiratory problems and metabolic complications, and cesarean birth, and their associated morbidities**. Patients with GDM are at high risk of developing **type 2 diabetes later in life**.

- **Risk factors**

Personal history of impaired glucose tolerance, A1C ≥5.7 percent, impaired fasting glucose, or GDM in a previous pregnancy (GDM in previous pregnancy has 40 percent risk of recurrence.
Family history of diabetes, especially in a first-degree relative.
Prepregnancy BMI >30 kg/m2, significant weight gain in early adulthood or between pregnancies, or excessive gestational weight gain during the first 18 to 24 weeks of pregnancy.
Older maternal age (especially >40 years of age).
Medical condition/setting associated with development of diabetes, such as polycystic ovary syndrome (PCOS).
Previous birth of an infant ≥4000 g (approximately 9 pounds).

Management

- Briefly, antepartum glycemic targets are:
- Fasting blood glucose concentration: <95 mg/dL
- One-hour postprandial blood glucose concentration: <140 mg/dL
- Two-hour postprandial glucose concentration: <120 mg/dL
- **Insulin (first line)**

a. Regular (most studied, drug of choice in combination with neutral protamine Hagedorn)

b. Neutral protamine Hagedorn insulin (in combination with regular insulin, drugs of choice)

c. Detemir – Has indication for pregnancy use.

d. Lispro and aspart starting to be used.

- **Sulfonylureas** (glyburide) in patients unable to use insulin injections;
- **Metformin** may have advantage over glyburide; studies are ongoing, (not first line).

Pre-eclampsia

Preeclampsia is a multisystem progressive disorder characterized by the new onset of hypertension and proteinuria or the new onset of hypertension and significant end-organ dysfunction with or without proteinuria in the last half of pregnancy or postpartum. It is caused by placental and maternal vascular dysfunction and resolves after delivery over a variable period of time

Criteria for the diagnosis of preeclampsia:

1) Systolic blood pressure ≥140 mmHg or diastolic blood pressure ≥90 mmHg on at least 2 occasions at least 4 hours apart after 20 weeks of gestation in a previously normotensive patient **PLUS the new onset of 1 or more of the following:**
2) Proteinuria ≥0.3 g in a 24-hour urine specimen or protein/creatinine ratio ≥0.3 (mg/mg) (30 mg/mmol) in a random urine specimen or dipstick ≥2+ if a quantitative measurement is unavailable
3) Platelet count <100,000/microL
4) Serum creatinine >1.1 mg/dL (97.2 micromol/L) or doubling of the creatinine concentration in the absence of other renal disease
5) Liver transaminases at least twice the upper limit of the normal concentrations for the local laboratory
6) Pulmonary edema
7) New-onset and persistent headache not accounted for by alternative diagnoses and not responding to usual doses of analgesics
8) Visual symptoms (eg, blurred vision, flashing lights or sparks, scotomata)