

Dr. Robins Informal Teaching

Week 1 - Orientation

Introduction

- To:
 - Labour
 - Delivery
 - Prenatal care

Definition of Labour

- Contractions every 2-3 minutes
 - Lasting 40-60 seconds
 - Resulting in:
 - Cervical dilatation
 - Effacement
 - Descent of the presenting part

Causes for Onset of Labour

1. Increased oxytocin receptors
 - x6 at 12 wk
 - x80 at term
2. Interruption of pituitary hypothalamic axis
 - Anencephaly
3. Progesterone
4. Prostaglandins
 - PGE2 and F2 α

Mechanisms of Labour

- Engagement
- Descent
- Flexion
- Internal rotations
- Extension
- Delivery

Components of Labour

- Power
- Passage
- Passenger

Presentation

- Cephalic
 - Vertex
 - Face
 - Brow
- Breech
 - Complete
 - Incomplete
 - Frank
- Transverse or shoulder

Position

The orientation of the fetus in the uterus, identified by the location of the presenting part of the fetus relatively to the pelvis of the mother.

Lie

It is the longitudinal axis of the baby relative to the mother's.

For example:

- Oblique
- Transverse

Demonstration of Labour

Antenatal Care

Diagnosis of Pregnancy

1. Serum B hCG
 - Detected before missed menses
2. Transvaginal ultrasound
 - Gestational sac at 4 wks
3. Confirmation of intrauterine pregnancy by yolk sac
4. Fetal pole
 - 5-6 wks
5. Fetal heart
 - 6 wk 2 d

Signs + Symptoms

- Fatigue
- Nausea
- Frequency
- Amenorrhea
- Breast tenderness
- Hegar's + Chadwick's sign

Calculation of Estimated Date of Confinement (EDC)

- Naegele's Rule
- Early U/S

Frequency of Prenatal Visit

- Every 4 wks until 28 wks
- Every 2 wks until 36 wks
- Then weekly

First Office Visit Bloodwork

1. Hb
2. Group type antibody screen
3. Virus screens
 - Rubella
 - Varicella
 - HIV
 - Serum hepatitis B
4. Urinalysis + culture
5. Chlamydia/GC screen
6. Syphilis

Nutrition

Recommended weight gain is determined by BMI

1. BMI < 19 – 28-40 lb
2. BMI 19-25 – 25-35 lb
3. BMI 25-29 – 15-25 lb
4. BMI > 30 – 11-20 lb

Calories

Generally 25-35 kcal/kg of ideal body weight

This is increased in pregnancy 100-300 kcal/day

Dietary Composition

1. Protein 1.1g/kg/d
2. Iron – 30mg elemental iron/day
3. Calcium 1000mg/day
4. Folic acid 400 mcg/d
5. Fish 12 oz/wk

Exercise/Travel

- Progressive walking daily
- Fly to 36 wks
- On long flights
 - Stay hydrated
 - Move about cabin every 2 hrs

Additional Tests

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. 12 wks <ul style="list-style-type: none"> – IPS #1 <ul style="list-style-type: none"> • B hCG • Papp A • Nuchal fold thickness 2. 18 wks <ol style="list-style-type: none"> A. IPS #2 <ul style="list-style-type: none"> • ↑ hCG • ↓ AFP • ↓ Serum unconjugated estriols • ↑ Inhibin A B. U/S survey fetus <ul style="list-style-type: none"> • Placental localization | <ol style="list-style-type: none"> 3. 28 wks <ul style="list-style-type: none"> – 50 g glucose screen – Above 7 – warrants 2hr glucose tolerance test – Above 11 – referral to endocrinology 4. At 36 wks <ul style="list-style-type: none"> – Group B streptococcal screen |
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Questions?