Prenatal & Postpartum Care

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Diagnosing Pregnancy

Presumptive Signs
Probable Signs
Positive Signs

Presumptive Signs
• Cessation of menses
• Nausea/vomiting
• Breast tenderness
• Colostrum
• Chadwick’s Sign
• Quickening

Probable Signs
• Positive pregnancy test
• Change in uterine size & shape
• Palpation of fetus
• Palpation of fetal movement
• Piskacek’s Sign
• Hegar’s Sign
• Goodell’s Sign

Positive Signs
• Fetal heart tone
• Ultrasound of fetus
• X-ray of fetus
• Birth

Options
• Termination
  – Counseling
  – Laws vary
  – Practices vary
  • Usually <12 weeks
  • Some providers/facilities won’t do at any gestation
• Continuation
  – Help with prenatal care
  – Adoption
  – Counseling
Prenatal Care

- First Visit
  - Subjective Data
  - Objective Data
  - Estimating Gestational Age (EGA)
  - Nutrition
- Routine Visits
  - Scheduling
  - Subjective Data
  - Objective Data
  - EGA

First Prenatal Visit

Subjective Data

- Baseline Demographics
- Social History
  - Father of baby
  - Other family members at home
  - Other support
- Financial

First Prenatal Visit

Subjective Data

- Family History
  - Diabetes
  - Hypertension
  - Seizures
  - Hematological disorders
  - Multiple pregnancies
  - Mental retardation
  - Congenital abnormalities

Abuse

- Abuse Assessment Screen
  - Ever been emotionally/physically abused
  - Within the last year
  - Since being pregnant
  - Mark any areas of injury
  - Refer for appropriate counseling

Gravid/Para recorded with 5 digit system

- G_P_ _ _ _
  - G = number of times pregnant
  - P (1st place) number of deliveries over 37 wks
  - P (2nd place) number of deliveries under 37 wks
  - P (3rd place) number of abortions
    - Spontaneous or therapeutic
  - P (4th place) number of children now living

First Prenatal Visit

Subjective Data

G3P1011

- Now pregnant for the 3rd time
- 1 child born at term
- No preterm deliveries
- 1 abortion
  - Note if spontaneous or therapeutic
- 1 child now living
First Prenatal Visit
Subjective Data

Menstrual History
- Age at menarche
- Regular/irregular
- Length of cycles
- Duration of flow
- Amount/characteristics of flow
- Intermenstrual bleeding
- Premenstrual symptoms

Previous Pregnancies
- Date of birth or abortion
- Place of birth
- Length of gestation
- Duration of labor
- Type of delivery
- Type of analgesics/anesthesia
- Sex, weight & status of neonate
- Complications of pregnancy/delivery

Contraceptive History
- Methods most recently used
- All previous methods used
- Length and consistency of use
- Satisfaction with method
- Side effects

Gynecology History
- Previous gyn disorders
  - Endometriosis/anomalies
- Surgery on reproductive organs
- Reproductive system/pelvic disorders
  - GC, CT, Trich, Syphilis, HSV, HPV, Yeast
- Difficulty becoming pregnant
- DES exposure

First Prenatal History
Subjective Data

Sexual History
Surgical History
Blood transfusions since 1980
Accidents
Allergies

Family medical History
Brief review of systems
Exposure to teratogens
Nutrition

Objective Data
- Vitals with height and weight
  - Every visit
- Abdomen
- Extremities
- Vagina/introitus
  - Discharge
  - Tone
  - Bartholin’s glands, Urethra, Sebaceous glands (BUS)
First Prenatal Visit

Objective Data

• Breasts
  – Consistency (soft/firm)
  – Tenderness (tender/non-tender)
  – Masses (describe)
  – Skin changes (dimpling)
  – Discharge
  – Nodes (masses/clear)
  – Nipples (everted, flat, inverted)

• Cervix
  – Consistency
  – Color
  – Characteristics of os
    • Eversion, erosion
  – Polyps

Cervical Exam

• Dilatation
  – 0-10 centimeters
• Effacement
  – 0-100%
• Descent
  – Ballotable +3

Eg: 2/25/-2/posterior/medium

• Position
  – Posterior, Midline, Anterior
• Consistency
  – Firm, medium, soft

• Uterus
  – Consistency
  – Position
  – Masses
  – Size/shape
  – Mobility

• Adnexa
  – Masses
  – Tenderness

Pelvis

• Diagonal conjugate
  – >12.5 cm
• Pubic Arch
  – <90 degrees
• Side Walls
  – parallel, divergent, convergent

• Ischial spines
  – Blunt, encroaching
• Sacrum
  – Hollow
• Coccyx
  – mobile

Initial Labs

• CBC, GC, CT, HIV, U/A, Pap Smear, VDRL, Rubella, HBsAG, RPR
• Blood type
  – Rh
  – Immunizations
    • PPD, MMR, Td (give only after 20 weeks)
First Prenatal Visit

Objective Data

Estimating Gestational Age (EGA)
- One of the most important tasks in prenatal care
- Expected Date of Confinement (EDC)
  - Traditional
- Estimated Date of Delivery (EDD)
  - More modern terminology
  - EDD is 280 days from the 1st day of the LNMP (+/- 14 days)

Objective Data

Naegele’s Rule
- Subtract 3 months from the LNMP
- Then add 7 days

Objective Data

An early bimanual exam
- Within the first trimester
- By an experienced examiner

An early Ultrasound
- Within the 1st trimester
- By an experienced sonographer

Objective Data

Quickening
- Perceived fetal movement by mother
  - +/- 19 wks with 1st pregnancy
  - +/- 17 wks with subsequent pregnancies

Fetal heart tones (FHT)
- 19-20 wks with fetoscope
- 11-12 wks with doppler

Objective Data

Fundal height
- In centimeters from the pubic symphysis to the top of the uterine fundus (over the curve)
- Measurement approximately equals the gestational age in weeks
  - 16-38 wks
  - +/- 3 cm

Objective Data

Nutrition
- Assess early in pregnancy
- Follow the USDA “Food Guide Pyramid”
- “Recommended Dietary Allowances” increase in pregnancy
- Education

Warning Signs
- Decreased fetal movement
- Abdominal cramping
- Vaginal leaking/bleeding
- Headaches
- Swelling
  - Hands/feet
Routine Visits

Schedule
• 0-24 weeks: Q 4 weeks
• 24-36 weeks: Q 2 weeks
• 36-40 weeks: Q 1 week
• 40-42 weeks: Twice a week

Routine Visits

Subjective Data (each visit)
• Fetal movement
• Cramping
• Vaginal leaking/bleeding
• Headaches/vision changes
• Swelling
• Diet

Routine Visits

Objective Data (each visit)
• Maternal vital signs, weight, urine dip
• Fundal height
• Estimated Fetal Weight
• Fetal heart tones
• Fetal position
  – After 31 weeks

Routine Visits

Estimated Fetal Weight (every visit)
• Leopold’s Maneuvers
  – What’s in the fundus
  – Where are the small parts and spine
  – What is presenting in the pelvis
  – Where is the cephalic prominence
• Think IV bags or sacks of flour

Routine Visit

16-20 Weeks
• Offer Maternal Serum Alpha Fetal Protein
  – (MSAFP)
  – Offer amniocentesis if indicated
• What will client/practitioner do with the information?
  – “Get prepared”
  – Termination?

Routine Visit

18 Weeks
• Ultrasound
  – If indicated
  – Unsure LNMP
  – Fundal height different from dates
  – History of anomalies
Routine Visit  
26 Weeks

- 1 hour Glucose Tolerance Test (GTT)
  - If >140 do 3 hour GTT
  - If > than 200 diagnose as Gestational Diabetes Mellitus (GDM)
- CBC
- Kick Counts
- Review preterm labor signs
- Begin “birth plan”

Routine Visit  
28 Weeks

- RhoGam if Rh negative
- Family planning for after this pregnancy
- Review breast feeding

Routine Visit  
36 Weeks

- CBC, GC, CT, GBS
- Review labor signs
  - Loss of “mucous plug”
  - “Gush” of fluid from vagina
  - Contractions
    - 5’ apart (time from the beginning of one to the beginning of another)
      - If primigravida: come in after 2 hours
      - If multigravida: come in after 1 hour

Prenatal Visit  
>40 Weeks

- Non-Stress Test (NST) 2x a week
  - On External Fetal Monitor
  - FHTs increase 15 beats over baseline for 15 seconds, 2x in 20’ = “Reactive” NST
- U/S for Biophysical Profile weekly
  - Scores 0-10
  - 0 = emergent cesarean delivery
  - 10 = reassuring
- Consider delivery

Problem Pregnancies

- Abdominal pain (consult)
  - 1st trimester
    - Ectopic pregnancy, appendicitis
  - 2nd/3rd trimesters
    - Abruption
    - Appendicitis
    - Gallbladder disease

Problem Pregnancies

- Abnormal fundal height (consult)
  - 3 cm or more difference from EGA
  - Intrauterine Growth Retardation (IUGR)
  - Large for Gestational Age (LGA)
- Abnormal Pap Smear
- Anemia
  - Hgb <12.0: FeSo4 325 mg QD
  - <11.0: BID, <10.0 TID, <9.0 consult
Problem Pregnancies

- Bacterial Vaginosis
  - At risk for Pre-term Labor (PTL)
  - 1st trimester: Clindamycin 300mg PO BID x 7
  - 2nd trimester: Flagyl 250mg PO TID x 7
- Candidiasis: OTC meds
- Chronic Hypertension (consult)
  - 24 hour protein and creatinine clearance
  - NST weekly after 31 weeks

Problem Pregnancies

- Diabetes (consult)
  - FBS & 2 hour post prandial QID
  - Insulin
  - U/S for anomalies between 18-20 weeks
  - U/S for growth at 28, 34 and 38 weeks
  - Weekly NSTs after 34 weeks
  - Maintain FBS <90 and 2 hour <115

Problem Pregnancies

- Gestational Diabetes Mellitus (Consult)
  - Early 1 hour GTT (50 gm glucose load) and re-screen at 26 weeks
    - If >140 get 3 hour GTT (100 gm glucose load)
  - 3 hour GTT
    - Fasting < 105
    - 1 hour < 190
    - 2 hour < 165
    - 3 hour < 145

Problem Pregnancies

- If 1 abnormal value on 3 hour GTT
  - ADA diet based on current body weight
  - Finger stick fasting and 2 hour pp at each visit
  - U/S at 28 and 36 weeks for growth
  - Weekly visits

Problem Pregnancies

- If 2 abnormal values on 3 hour GTT
  - Add to the previous regimen
  - FBS, 2 hour pp (TID)
  - Consider insulin
  - Consider early delivery

Problem Pregnancies

- Group B Strep
  - With any positive cultures treat with antibiotics while in labor
  - Notify peds
- Sickle Cell
  - Urine culture each trimester
  - Kick counts after 26 weeks
  - U/S for growth between 34-36 weeks
Problem Pregnancies

- HBsAg (if positive/consult)
  - Labs: liver function tests, Hepatitis E antigen, Hepatitis core antibody
- History of Fetal Demise (consult)
  - Early 1 hour GTT
  - Genetic U/S between 18-24 weeks
  - Weekly NSTs after 30 weeks

Postpartum

- Uterine Involution
  - Fundus located ½ way between symphysis pubis and umbilicus immediately after delivery
  - Decreases 1 finger breadth/day
  - By 2 weeks uterus is not palpable trans-abdominally

- Lochia Rubra
  - Lasts 1st 2-3 days
  - Dark red color
- Lochia Serosa
  - Lasts 3-10 days
  - Pinkish color
- Lochia Alba
  - Last 1-2 weeks
  - Creamy to yellowish

Problem Pregnancies

- Hypertension/gestational (consult)
  - B/P:
    - Sitting: >140/90
    - 30/15 increase from baseline
  - Labs: CBC, Uric Acid, Serum Creatinine, 24 hour urine protein, creatinine clearance, calcium
  - Weekly NSTs
  - Weekly weight

- MSAFP (abnormal/consult)
  - Consider amniocentesis
  - Consider options: continuing/termination
- Rh negative (consult)
  - RhoGam at 28 weeks
- Rubella: Non-immune or equivocal
  - Vaccination postpartum

Postpartum

- Recurrence of ovulation/menstruation
  - Non-breast feeding
    - 40% resume in 6 weeks
    - 65% resume in 12 weeks
    - 90% resume in 24 weeks
  - Breast feeding
    - 45% resume in 24 weeks
Postpartum

Nutrition
- Bottle feeding
  - RDAs return to pre-pregnant levels
- Breast Feeding
  - Continue pregnant RDAs
  - 200 calorie increase over pregnant level

Postpartum

Engorgement

- Breast Feeding
  - Continue breast feeding every 2-3 hours
  - Manual expression (pump) after each feeding
  - Warm soaks especially prior to feeding
  - Ice between feedings

Postpartum

Engorgement

- Non-breast feeding
  - Binder
  - Ice packs to breasts
  - No warm packs
  - No pumping/massaging
- In both breast and non-breast feeding
  - Last 24-48 hours
  - Analgesics
  - Support bra

Postpartum

Mastitis

Signs and symptoms
- Usually after the 1st or 2nd week
- Rapid temperature increase
  - 103-104
- Increased pulse
- Chills, malaise, headache
- Area of breast red, tender, hard lump(s)

Postpartum

• The Blues
  - Transient period of depression
  - “Let down” feeling
  - Etiology unknown
    - Correlation with Bipolar Disease
    - Hormonal changes
    - Fatigue
    - Overload
Postpartum

6 week exam
- CBC, GC, CT, Pap smear
- If diabetic get 1 hour GTT
- Physical exam (the same as first prenatal)
- Review options for birth control
- Review how family is adapting to new baby
- Review breast/bottle feeding

Questions?

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Selected Bibliography