PRENATAL CARE for women with OBESITY

Week 27

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Reading Assignment
ACOG Practice Bulletin #156, December 2015
Obesity in Pregnancy

OB GYN To Go: Mobile Learning for Residents
- Podcast Episode 010: Effect of Obesity in Pregnancy
LEARNING OBJECTIVES

• To be able to identify and designate classifications of obesity

• To gain an understanding of the impact of obesity on pregnancy

• To review the recommendations for obesity during prenatal care

• To be comfortable counseling the patient about her risk factors and treatment plan
CASE VIGNETTE

• Ms. D.B. is a 28y G1 P0 woman at 11 weeks EGA (dated by 8wk u/s) who presents for initial prenatal visit. She has no complaints.

• She reports occasional headaches, which are well-managed by hydration and PO Tylenol. She denies any pain or vaginal bleeding. This pregnancy was unplanned, but she and her husband are happy about it.
FOCUSED HISTORY

• What will be pertinent in her history?

• POB: No prior pregnancies
• PGYN: Irregular menses; No STI/Cysts/Fibroids; No abnormal paps
• PMH: Obesity – BMI 36
• PSH: Denies
• Meds: PNV, Tylenol PRN
• All: NKDA
• Soc: No toxic habits; Lives with her husband; Works as a computer programmer; Accepts blood products
• FHx: No hx gyn cancers; No hx DM or HTN
PERTINENT PHYSICAL EXAM FINDINGS

• What will be pertinent in her physical exam?
  
  • VS: P 76   BP 117/74   Wgt: 92kg   Hgt: 160cm
  • HEENT: Thyroid – no masses/enlargement
            Skin – no acanthosis nigricans
  • Cor: Regular rhythm, no M
  • Pulm: CTAB b/l
  • Abd: Soft, NT/ND, +BS x 4Q
  • Pelvic: Vulva: Normal external female genitalia; No lesions
            Vagina: Healthy-appearing mucosa, No discharge
            Cervix: Parous os; L/C/P
            Uterus: NT, ~8wk size, antverted
            Adnexae: No mass/tenderness b/l
  • Ext: No calf tenderness b/l; +1 DTR b/l
OBESITY

• How is obesity determined?
  • Obesity is defined by body mass index (BMI)

• How is BMI calculated?
  • $\text{BMI} = \frac{\text{kg}}{\text{m}^2}$
CLASSIFICATION

• How does the WHO use BMI ranges to categorize obesity?

<table>
<thead>
<tr>
<th>Category</th>
<th>BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>&lt; 18.5</td>
</tr>
<tr>
<td>Normal weight</td>
<td>18.5 – 24.9</td>
</tr>
<tr>
<td>Overweight</td>
<td>25.0 – 29.9</td>
</tr>
<tr>
<td>Obesity class I</td>
<td>30.0 – 34.9</td>
</tr>
<tr>
<td>Obesity class II</td>
<td>35.0 – 39.9</td>
</tr>
<tr>
<td>Obesity class III</td>
<td>≥ 40</td>
</tr>
</tbody>
</table>
ANTENATAL IMPLICATIONS

• How does obesity impact the antepartum period?
  • Pregnancy loss
    SAB
    Recurrent miscarriage
  • Stillbirth
    40% higher likelihood of stillbirth
  • Anomalies
    Ultrasound limitations
    NTDs
    Limb reduction
    Orofacial
    Cardiovascular
  • Complications
    GDM
    Sleep apnea
    Fatty liver
    PEC
EVALUATION

• How can prenatal care be modified for the obese patient?

• Screening
  • GDM
    • ACOG - Early GCT
    • CUIMC - Hemoglobin A1C

• Obstructive Sleep Apnea (OSA)
  • Snoring, excessive daytime sleepiness, witnessed apneas, or unexplained hypoxia
EVALUATION

• How can prenatal care be modified for the obese patient?
  • Consults
    • Anesthesiology
      • ACOG – BMI ≥ 30, prior to labor
      • CUIMC – BMI ≥ 40, third trimester
GESTATIONAL WEIGHT MANAGEMENT

• What is the approach to antenatal weight management?
  
  • Dietary control, Exercise, Behavior Modifications
  
  • Record BMI at initial prenatal visit
  
  • IOM recommendations for gestational weight gain by BMI category
IOM RECOMMENDATIONS

• What are the IOM recommendations for total gestational weight gain?

  • Underweight
    • 28-40 lbs

  • Normal Weight
    • 25-35 lbs

  • Overweight
    • 15-25 lbs

  • Obese (all classes)
    • 11-20 lbs
SURVEILLANCE

• Are there any recommendations regarding antenatal fetal surveillance in obese pregnant women?

  • ACOG
    • ACOG does not make a recommendation for or against routine antenatal fetal surveillance in obese pregnant women

  • CUIMC
    • Recommend weekly antenatal testing starting at 34 weeks gestation for patients with a BMI > 35
    • Encourage weekly antenatal testing starting at 36 weeks gestation for patients with a BMI 30-34
COUNSELING

• How would you counsel this patient about the implications of her BMI for this pregnancy and during her interpregnancy interval?

  • Why is it a problem for me?

  • Why is it a problem for my baby

  • What can I do for this pregnancy?

  • Can I do something to lower the risk of problems in future pregnancies?
CODING AND BILLING

• Conditions that affect the management of pregnancy, childbirth and the puerperium are classified in categories O00 through O9A in Chapter 15 of the ICD-10-CM

• O99.21 **Obesity complicating pregnancy**, childbirth, and the puerperium
  • O99.210 **Obesity complicating pregnancy**, unspecified trimester
  • O99.211 **Obesity complicating pregnancy**, first trimester
  • O99.212 **Obesity complicating pregnancy**, second trimester
  • O99.213 **Obesity complicating pregnancy**, third trimester
Social Determinants of Health

2018 - Exploration of gestational weight gain among low-income pregnant women

- Low-income women are likely to have a limited food budget and rely on cheap, calorie-dense foods to prevent hunger and maintain sufficient food supply for their families.
- African American women are more likely to exceed IOM recommendations for weight gain during pregnancy.
- Perception and knowledge of appropriate weight gain may be contributing factors to excess gestational weight gain for African American women.

- More support is needed for community and financial assistance programs, who directly serve low-income women, to provide gestational weight gain educational support and help women achieve optimal health for themselves and their children.
- There is a need for personalized education of the patient and their social support network prior to conception and throughout prenatal care.
EVIDENCE

Reference

• .BBonBMI(Pregnancy
• Description: Gestational weight gain counseling
• The patient was counseled on the recommended weight gain based on her BMI

***<18.5  28-40 lbs
***18.5 – 24.9  25-35 lbs
***25.0 – 29.9  15-25 lbs
***> 30.0  11-20 lbs

She was also counseled on the sequelae associated with obesity in pregnancy, including increased risk of miscarriage, gestational diabetes, preeclampsia, fetal anomalies, and stillbirth
EVIDENCE

• References


