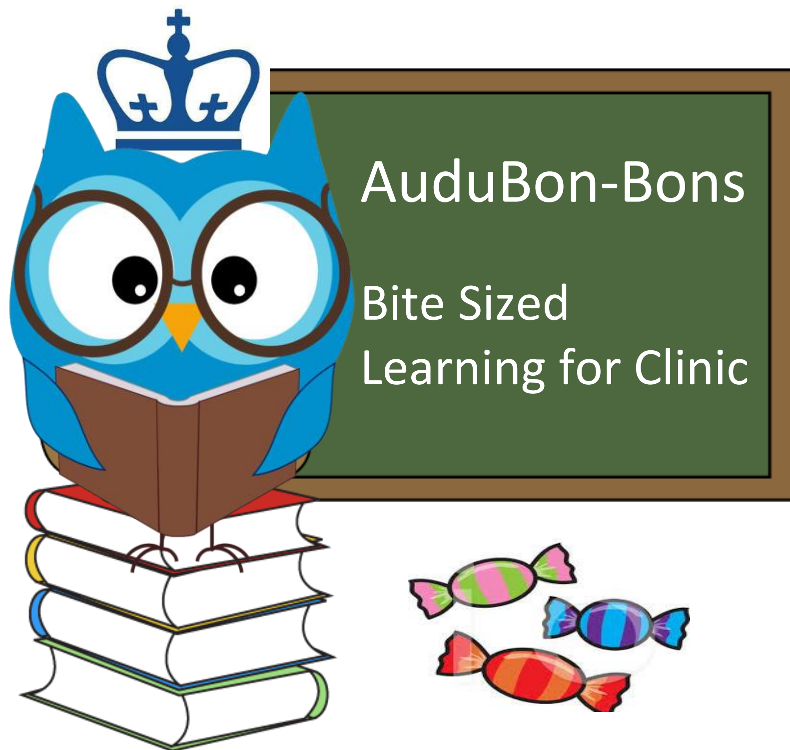
PRENATAL CARE for women with OBESITY

Week 27



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<u>Reading Assignment</u>
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
- http://www.obgyntogo.com/podcast/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, anteverted
    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?
    - BMI = kg/m^2

CLASSIFICATION

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

Category	BMI
Underweight	< 18.5
Normal weight	18.5 – 24.9
Overweight	25.0 – 29.9
Obesity class I	30.0 – 34.9
Obesity class II	35.0 – 39.9
Obesity class III	$\geq$ 40

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 $\geq$ 30, prior to labor
      - CUIMC – BMI $\geq$ 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 $\geq$ 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 here 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?

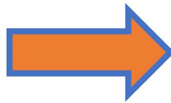
CODING AND BILLING

- 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** complicati**ng** **pregnancy**, childbirth, and the puerperium
    - O99.210**Obesity** complicati**ng** **pregnancy**, unspecified trimester
    - O99.211**Obesity** complicati**ng** **pregnancy**, first trimester
    - O99.212**Obesity** complicati**ng** **pregnancy**, second trimester
    - O99.213**Obesity** complicati**ng** **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

- Nunnery, D., Ammerman, A. and Dharod, J., 2018. Predictors and outcomes of excess gestational weight gain among low-income pregnant women. *Health care for women international*, *39*(1), pp.19-33.

EPIC Phrase

- .BBonBMIPregnancy
- 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

  - Obesity in pregnancy. ACOG Practice Bulletin No. 156. American College of Obstetricians and Gynecologists. Obstet Gynecol 2015;126:e112–26
  - World Health Organization. Obesity: preventing and managing the global epidemic. Report of a WHO consultation. Geneva: WHO; 2000.
  - Weight gain during pregnancy. Committee Opinion No. 548. American College of Obstetricians and Gynecologists. Obstet Gynecol 2013;121:210–2
  - Centers for Medicare and Medicaid Services. ICD-10-CM Official Guidelines for Coding and Reporting [Internet]. 2018 [cited 2018 Aug 27]. Available online: https://www.cms.gov/Medicare/Coding/ICD10/Downloads/2018-ICD-10-CM-Coding-Guidelines.pdf