

# STIs IN PREGNANCY

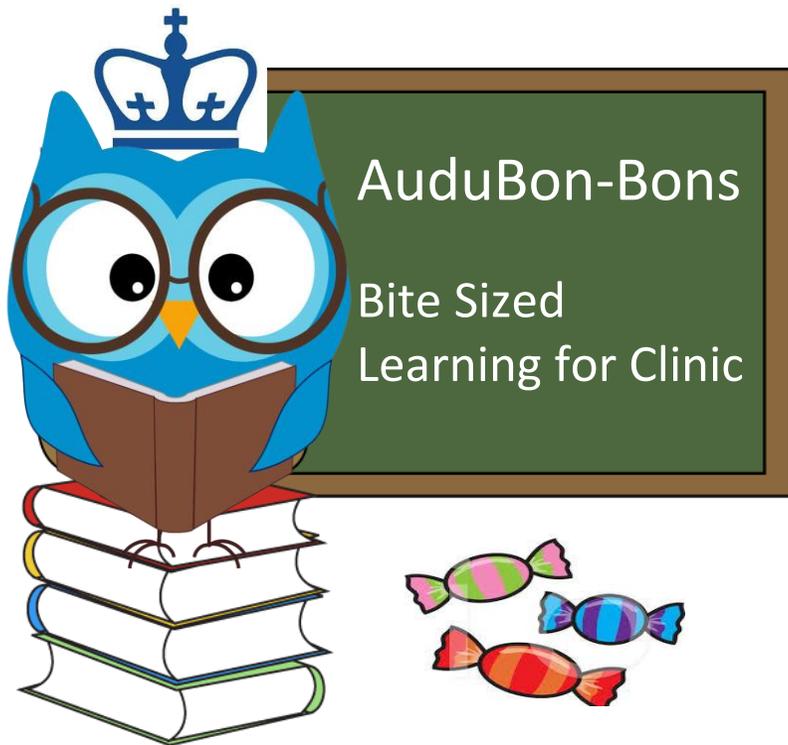
## Week 30

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### Reading Assignment:

Mobile App: CDC STD Tx Guide 2015

- Guidelines
  - Special Populations: Pregnant Women



# LEARNING OBJECTIVES



- To review the recommendations for STI screening in pregnancy
- To gain an understanding of the risk factors for different STI's
- To highlight STI treatments unique to pregnancy
- To be comfortable counseling the patient about her risks and management plan



# CASE VIGNETTE

- D.B. is a 26y G2 P0010 woman at 10 weeks dated by 7wk u/s who presents for initial prenatal visit. She has no complaints.
- She is happy about this pregnancy, but states it was unplanned as she has not used condoms regularly since having her IUD removed 6 months ago due to an infection.
- She states she received treatment for the infection with a single pill, but forgot to return to her doctor for a follow up visit.



# FOCUSED HISTORY

## What will be pertinent in her history?

- POB: 1 TOP 3 years ago
- PGYN: Regular menses; +Hx STI (likely CT) s/p treatment, no TOC; No cysts/fibroids; No abnormal paps
- PMH: Asthma, no recent attacks, no hosp/intub/steroids
- PSH: Denies
- Meds: PNV
- All: NKDA
- Soc: No toxic habits; Lives with her boyfriend; Accepts blood products



# PERTINENT PHYSICAL EXAM FINDINGS

## What will be pertinent in her physical exam?

- VS: P 82 BP 107/66 Wgt: 50kg Hgt: 158cm
- 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, physiologic discharge  
Cervix: **No CMT**; L/C/P  
Uterus: **NT**, ~8wk size, anteverted  
Adnexae: **No mass/tenderness b/l**
- Ext: No calf tenderness b/l; +1 DTR b/l



# ROUTINE PRENATAL SCREENING

**Which STIs should be included in screening for ALL pregnant women during prenatal care?**

- HIV
- Syphilis
- Hepatitis B



# HIV

## What are the prenatal screening recommendations for HIV?

- Screen at initial prenatal visit
  - Notification
  - Opt-out screening
- Education
  - Importance of retesting
  - Prevention of perinatal transmission
- Retesting in third trimester (<36 weeks) for women at high risk of infection



# HIV

## What are examples of high risk for acquiring HIV infection?

- Illicit drug use
- STDs during pregnancy
- Multiple sex partners during pregnancy
- Areas with high HIV prevalence
- HIV+ partners



# SYPHILIS

## What are the prenatal screening recommendations for syphilis?

- Screen at initial prenatal visit
- Suboptimal access – RPR card test screening
- Rescreen in early third trimester and at delivery if...?
  - High risk for syphilis
  - Area of high syphilis morbidity



# HEPATITIS B

## What are the prenatal screening recommendations for HBV?

- Screen at initial prenatal visit
- Role of vaccination status
- Rescreen in third trimester if...?
  - Not previously screened
  - High risk for infection



# HEPATITIS B

## What are examples of increased risk for HBV infection?

- >1 sex partner in last 6 months
- Evaluation/treatment for an STD
- Recent or current injection-drug use
- HbsAg+ partner
- Clinical evidence of hepatitis



# POPULATION-BASED PRENATAL SCREENING

**Which STIs are included in screening at the first prenatal visit for women as a result of age or increased risk?**

- Gonorrhea
- Chlamydia
- Hepatitis C



# GONORRHEA/CHLAMYDIA

**What are the prenatal screening recommendations for gonorrhea and chlamydia?**

- Screen at initial prenatal visit
  - <25 years old
  - $\geq 25$  years old at increased risk
- Third trimester rescreening for women remaining at high risk for infection
- After treatment
  - 3-4 weeks after treatment for **test-of-cure (Chlamydia)**
  - Retesting within 3 months



# GONORRHEA/CHLAMYDIA

**What are examples of increased risk for gonorrhea and chlamydia?**

- New sex partner
- More than one sex partner
- Sex partner with concurrent partners
- Sex partner who has a sexually transmitted infection
- Public health guidance to identify risk



# HEPATITIS C

## What are screening recommendations for HCV?

- Screen all pregnant women **at risk** at initial prenatal visit.

## What are examples of risk factors for HCV infection?

- Past or current injection drug use
- Blood transfusion before July 1992
- Unregulated tattoo
- Hx long-term hemodialysis
- Intranasal drug use and other percutaneous exposures



# OTHER STI SCREENING

**What is the screening recommendation for each of the following STIs in pregnancy?**

- **HSV-2**

- Evidence does not support routine serologic screening
- Possibly useful for identification/counseling of patients at risk for infection during pregnancy

- **Trichomonas vaginalis**

- Evidence does not support routine serologic screening



# TREATMENTS IN PREGNANCY

What is the recommended management in pregnancy for the following STIs?

- **Syphilis with PCN allergy**
  - Parenteral penicillin G
  - **PCN Allergy** – Desensitization followed by treatment with PCN
- **History of HSV-2 outbreaks**
  - **Suppressive therapy at 36 weeks**
    - Acyclovir 400mg PO TID
    - Valacyclovir 500mg PO BID
- **N. gonorrhoea**
  - Dual therapy – Ceftriaxone 250mg IM + Azithromycin 1g PO
  - **Cephalosporin allergy** ? Spectinomycin ? ID consult



# COUNSELING

**How would you counsel this patient about her risks and her management plan?**

- Sequelae
- Testing and treatment
  - Expedited partner therapy
- Safe sex practices



# CODING AND BILLING

- **ICD-10**

- **098.211** - Gonorrhea complicating pregnancy, first trimester
- **098.111** – Syphilis complicating pregnancy, first trimester
- **098.711** – Human immunodeficiency virus disease complicating pregnancy, first trimester
- **098.311** – Other infectious diseases with sexual mode of transmission complicating pregnancy, first trimester



# SOCIAL DETERMINANTS OF HEALTH

Prevalence of self-reported curable STDs during pregnancy, by maternal characteristic

Maternal Characteristic	Prevalence
Age	<25 years of age – 4.6% ≥25 years of age – 1.9%
Race/ethnicity	Non-Hispanic black race/ethnicity – 7.1% Other race/ethnicity – 2.3%
Marital status	Unmarried – 4.0% Married – 1.9%
Education	≤ High school – 3.7% Some college – 2.7%
Income	Annual income < \$25,000 – 3.8% Annual income ≥ \$25,000 – 1.9%

- This was a report on prevalence data on four common STDs among a population for whom surveillance has been limited and few other data are available in the literature.

- This study highlights a concern with substantial clinical, public health, and economic consequences and for which interventions are readily available, including screening, diagnostic testing, and effective treatments

- More studies are needed that evaluate screening and treatment of STDs among women during the course of prenatal care in order to improve opportunities to assess the interactions between STDs and adverse pregnancy outcomes.



# EVIDENCE

## Reference

- Williams, C.L., Harrison, L.L., Llata, E., Smith, R.A. and Meites, E., 2018. Sexually transmitted diseases among pregnant women: 5 states, United States, 2009–2011. *Maternal and child health journal*, 22(4), pp.538-545.



# EPIC Phrase

- .BBonSTIPregnancy
- Description: Antenatal STI screening counseling
- The patient was counseled that per CDC recommendations, part of routine prenatal care includes screening for the following STI's:
  - HIV
  - Hepatitis B
  - Syphilis
  - Gonorrhea & Chlamydia (if <25y.o. or with risk factors)

She was also counseled that STIs can have serious effects on her and her baby, some which may not be discovered until long after birth. We reviewed the importance of continued safe sex practices throughout pregnancy and the need for adherence to any treatments given to treat or prevent STI-related complications during pregnancy or childbirth.



# EVIDENCE

- References

- Centers for Disease Control and Prevention. (2015). Sexually Transmitted Diseases Treatment Guidelines. Retrieved from <https://www.cdc.gov/std/tg2015/specialpops.htm> (Accessed June 2019)
- American College of Obstetricians and Gynecologists. Clinical management guidelines for obstetrician-gynecologists. Management of herpes in pregnancy. ACOG Practice Bulletin No. 82. Obstet Gynecol 2007;109:1489–98.)
- Dual therapy for gonococcal infections. Committee Opinion No. 645. American College of Obstetricians and Gynecologists. Obstet Gynecol 2015;126:e95–9.
- Expedited Partner Therapy. ACOG Committee Opinion No. 737. American College of Obstetricians and Gynecologists. Obstet Gynecol 2018;131:e190–3.

