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SECTION 13: Miscellaneous Conditions

CHAPTER 1

Routine Prenatal Care

Megan Schneiderman and Amira El-Messidi

A 27-year-old primigravida at 11^{+1} weeks' gestation by menstrual dating presents for her first visit for routine prenatal care, accompanied by her husband. While discussing the comprehensive medical history with you before you meet the couple, your obstetric trainee mentions that the patient is allergic to penicillin.

LEARNING OBJECTIVES

1. Take a comprehensive prenatal history, demonstrating the ability to appropriately assign a gestational age based on clinical and sonographic parameters
2. Appreciate defining features for a severe penicillin allergy and provide safe alternative intrapartum pharmacologic treatment where clinically indicated
3. Address common aspects of prenatal care for a low-risk patient, including, but not limited to, routine prenatal investigations and pharmacologic treatments, vaccinations, nutritional intake, chemical exposure, umbilical cord blood banking, and potential for air travel during pregnancy
4. Appreciate the importance of maintaining a low threshold for multidisciplinary collaboration where unexpected events occur among low-risk singleton pregnancies
5. Recognize important elements of the routine postpartum visit

SUGGESTED READINGS

Antenatal Care

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Chemical Exposure during Pregnancy

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Immunizations

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7. ACOG Committee Opinion No. 732: Influenza vaccination during pregnancy. *Obstet Gynecol.* 2018;131(4):e109–e114.
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15. Physical activity and exercise during pregnancy and the postpartum period: ACOG Committee Opinion, No. 804. *Obstet Gynecol.* 2020;135(4):e178–e188.

Travel during Pregnancy

16. ACOG Committee Opinion No. 746: Air travel during pregnancy. *Obstet Gynecol.* 2018;132(2):e64–e66.
17. Antony KM, Ehrenthal D, Evensen A, et al. Travel during pregnancy: considerations for the obstetric provider. *Obstet Gynecol Surv.* 2017;72(2):97–115.
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Umbilical Cord Blood Banking

20. ACOG Committee Opinion No. 771: Umbilical cord blood banking. *Obstet Gynecol.* 2019;133(3):e249–e253.
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Universal Cervical Length Screening in Low-Risk Singleton Pregnancies

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POINTS

1. Elaborate on defining features for high risk of anaphylaxis or a severe reaction to penicillin, appreciating that *one* feature is satisfactory. *(1 point each)*

Max 5

High risk for IgE-mediated reactions:
- ☐ Pruritic rash
- ☐ Urticaria (hives)
- ☐ Immediate flushing
- ☐ Hypotension
- ☐ Angioedema
- ☐ Respiratory distress (*e.g.*, wheezing, stridor, dyspnea, throat/chest tightness, repetitive dry cough)

High risk for severe non-IgE-mediated reactions:
- ☐ Eosinophilia and drug-induced hypersensitivity syndrome
- ☐ Stevens–Johnson syndrome
- ☐ Toxic epidermal necrolysis

Other:
- ☐ Positive penicillin allergy test
- ☐ Reaction to multiple beta-lactam antibiotics
- ☐ Recurrent reactions

Special note:
Refer to Prevention of Group B Streptococcal Early-Onset Disease in Newborns: ACOG Committee Opinion No. 797. *Obstet Gynecol*. 2020;135(2):e51–e72. [Correction in *Obstet Gynecol*. 2020 Apr;135(4):978–979]

2. In the absence of drug or environmental allergies, outline aspects of the comprehensive patient history elicited by your obstetric trainee at this patient's first prenatal visit. *(1 point each)*

Max 30

Current/recent pregnancy-related features and management, *if any*:

- ☐ Nausea and/or vomiting (*i.e.*, duration, frequency, quantity); effect of symptoms on daily living
- ☐ Vaginal bleeding
- ☐ Pelvic cramping, especially that prevents or awakens from sleep
- ☐ Determine whether a dating sonography or other investigations were performed

Gynecologic history:

- ☐ First day of the last menstrual period
- ☐ Cycle regularity
- ☐ Recent contraceptive use and whether pregnancy was planned
- ☐ Determine if and when prenatal vitamins have been initiated
- ☐ History of sexually transmitted infections (STIs); specifically, inquire about history of genital herpes simplex virus (in the patient or her partner)
- ☐ Duration since last cervical cytology test (*i.e.*, Papanicolaou test) and history of abnormal results
- ☐ Inquire about spontaneous or therapeutic undisclosed early pregnancy losses *in confidence with the patient* (individualized timing and setting)

Medical and surgical history:

- ☐ Determine if the patient accepts transfusion of blood products (*e.g.*, enquire whether patient is a Jehovah's Witness) and prior receipt of blood transfusions
- ☐ Chronic active or dormant medical or psychological conditions, including treatments
- ☐ Prior surgeries (*e.g.*, cerebral, cardiothoracic, abdominal-pelvic)

Social history and routine health maintenance:

- ☐ Ethnicity of the patient and partner
- ☐ Occupation (*e.g.*, exposure to daycare children, toxic chemicals, radiation, prolonged standing, physical activity, or risk of injury) and socioeconomic status (including food and housing security and potential barriers to accessing medical care)
- ☐ Dietary restrictions (*i.e.*, assess adequacy of calcium and iron intake)
- ☐ Vaccination status, namely, to COVID-19, hepatitis B, and annual *H. influenza*, and history of varicella disease or prior vaccination
- ☐ Exercise patterns (*i.e.*, type, frequency, and duration per week)
- ☐ Cigarette smoking, including quantity (*i.e.*, type [cigarette, cigar, water pipe/hookah, vape], quantity, and duration of use)
- ☐ Alcohol consumption (*i.e.*, type, quantity, and duration of use)
- ☐ Illicit drug use (*i.e.*, source, type, quantity, and duration of use)

CHAPTER 3

Teenage Pregnancy

Amira El-Messidi and Bianca Stortini

A 16-year-old primigravida at 16^{+5} weeks' gestation, confirmed two days earlier by dating sonography, is sent by her school nurse to your tertiary center's teen-pregnancy clinic. She presents accompanied by her mother, whom she prefers to be present during your encounter. Early fetal anatomy appeared normal without sonographic markers suggestive of aneuploidy. Urine pregnancy testing was initiated by her school nurse, who was concerned when the patient recently complained of increasing bloating and nausea over the past two months. The nurse assures you she had addressed the possibility of pregnancy with the teenager *prior* to urine testing.

Special note: *Although adolescents have increased rates of comorbidities, including alcohol consumption, smoking, illicit substance use, and psychiatric illness, the case scenario is presented as such for academic interest and to avoid content overlap of material addressed in respective chapters; readers are encouraged to complement subject matter where required.*

LEARNING OBJECTIVES

1. Take a focused history from a pregnant adolescent, appreciating the importance of screening questions for domestic violence and assessing for social determinants of health
2. Recognize causes for delayed prenatal care among pregnant teenagers amd provide counseling in a respectful, nonjudgmental manner
3. Demonstrate a structured approach to the identification of maternal-fetal-neonatal complications among pregnant adolescents, formulating an adolescent-focused multidisciplinary antenatal and postnatal care plan, consistent with the gold standard of care
4. Provide prenatal counseling for an active urogenital *C. trachomatis* infection, including comprehensive discussion on social health measures pre- and post effective treatment

SUGGESTED READINGS

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9. Peterson SF, Goldthwaite LM. Postabortion and postpartum intrauterine device provision for adolescents and young adults. *J Pediatr Adolesc Gynecol*. 2019;32(5S):S30–S35.
10. Public Health England. Collection on teenage pregnancy. Available at www.gov.uk/government/collections/teenage-pregnancy. Accessed February 8, 2021.

	POINTS
1. Before you meet the patient, alert your obstetric trainee to the significance for pretest counseling appropriately performed by the school nurse prior to urine pregnancy testing. *(1 point each)* **Positive pregnancy test:** ☐ Asking the teenager to consider potential pregnancy prior to confirmation provided opportunity to ensure her safety, in case of dangerous behavior including suicidality/homicidality **Negative pregnancy test:** ☐ Encouraging the teenager to entertain possible pregnancy may provide strategic opportunities for contraception education (long-term and emergency contraception as well as providing sex education)	2
2. With regard to a teenage pregnancy, what aspects of a focused history would you want to know? *(1 point per main bullet; max points specified per section)* **Pregnancy:** ***(9)*** ☐ Ensure pregnancy is not due to sexual violence (*e.g.*,; sex trafficking, rape, coercion) *[i.e., a form of 'structural conflict'[8]]* ☐ Age and involvement of the fetus' father and her current partner, if not the father ○ *Recognize that sociomedical comorbidities may prohibit the pregnant teen from identifying the father (e.g., mental handicap, was under drug/alcohol influence, multiple partners)* ☐ Assess her attitude toward pregnancy ☐ Assess for possible mood disorders, including past or present depressive symptoms, and possibly suicidal ideation or prior suicidal tendencies, anxiety ☐ Current vaginal bleeding, or within past months when she was unknowingly pregnant ☐ Current or recent lower abdominal cramps/pains ☐ Symptoms suggestive of genitourinary infections (*e.g.*, abnormal vaginal discharge, pruritis, dysuria)	30

- ☐ Current/recent vomiting, with her concurrent nausea
- ☐ Determine if patient had prior, *undisclosed,* spontaneous or therapeutic pregnancy losses

Socio-sexual history: ***(3)***

- ☐ History of sexually transmitted infections (STI) or need for hospitalization/surgery for pelvic inflammatory disease
- ☐ Assess whether patient is in a consensual relationship or experiences peer pressure to have sex *(i.e., a form of 'structural conflict'[§])*
- ☐ Current/prior multiple sexual partners

Medical comorbidities most relevant to pregnancy in teenagers: ***(4)***

- ☐ Known history of iron-deficiency anemia
- ☐ Mood disorder (*e.g.*, history of depression and/or anxiety conditions)
  - ○ *Obtain name/contact of treating physician*
- ☐ History of eating disorders (anorexia or bulimia nervosa); assess self-esteem
- ☐ Presence of neurodevelopmental delay/mental disability

Socioeconomic features: ***(max 5)***

- ☐ Living situation and basic house amenities[§]; receipt of public financial benefits
- ☐ Food security[§]
- ☐ Access and financial coverage of transportation costs for prenatal visits, vitamins, or other treatments that may not be covered by the local health care system
  - ○ *(i.e., 'access to affordable health services of decent quality'[§])*
- ☐ Social supports[§] *(i.e., family, community support, social worker)*
- ☐ Education[§] – patient's progress, access to a supportive system, and future plans
- ☐ Ethnicity and cultural attitude toward extramarital pregnancy

Social habits: ***(3)***

- ☐ Cigarette smoking and amount
- ☐ Alcohol consumption and amount
- ☐ Use of illicit substances, including type, frequency, supply source, mode of use *(e.g., IV, inhaled, smoked, snorted, oral),* and enrollment in treatment programs

Health maintenance: ***(2)***

- ☐ Assess if was on contraceptive method that led to inadvertent pregnancy/prior use of other contraceptives
- ☐ Vaccination status *(e.g., MMR, influenza, hepatitis A and B, tetanus)*

Medications and allergies: ***(2)***

- ☐ Prescribed or over-the-counter agents, particularly assess for use of psychotropic agents
- ☐ Allergies *(particularly important as pregnant teenagers have increased rates of STIs in pregnancy)*

Family history: ***(max 2)***

- ☐ Parental separation in early childhood *(i.e., a form of 'structural conflict'[§])*
- ☐ Exposure to family violence in early childhood *(i.e., a form of 'structural conflict'[§])*
- ☐ Family history of teenage pregnancy

Special note:

§ Items are among the 'social determinants of health' delineated by the World Health Organization; readers are encouraged to refer to www.who.int/health-topics/social-determinants-of-health#tab=tab_1, accessed February 9, 2021.

3. In conversation with the patient, demonstrate how you may phrase questions addressing the risk of domestic violence using a validated screening approach. You inform the patient she may decline to answer. *[the following provides five questions from one validated system; other approaches may be accepted] (1 point each)*

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☐ 1) Do you *feel safe* in your relationship with your partner or family?
☐ 2) Are there situations in the past six months when you have *felt afraid* of your partner or a family member?
☐ 3) In the past six months, have you ever been a *victim of domestic violence* from your partner or family member?
☐ 4) In the past six months, have you ever been hit, kicked, punched, or *physically hurt* by a partner or a family member?
☐ 5) In the past six months, have you ever been *forced* to have sex or do sexual things that you did not want to do by a partner or family member?

Special note:
Refer to Quinlivan JA, Evans SF. A prospective cohort study of the impact of domestic violence on young teenage pregnancy outcomes. *J Pediatr Adolesc Gynecol.* 2001; 14(1):17–23.

You learn that the patient lives with her 33-year-old mother and her younger sister in a small two-bedroom home in a poor socioeconomic sector of town. They have been unaware of the father's whereabouts for numerous years. The mother works as a part-time cashier and the family receives monthly governmental financial aid, which helps supply basic necessities of living. Until nine months ago, her mother's boyfriend was living with them for two years, during which the patient endured his verbal aggression. During that time, the school psychologist provided close care for the teen's resultant depressed mood, though she has never required antidepressant or other prescribed medications; she reports emotional stability since his departure. There is no history of smoking, alcohol intake, or use of illicit substances. Although one year behind her peers in schooling due to social disadvantages, her performance has been satisfactory.

The patient is generally healthy. With irregular menses and continued sporadic bleeding over the past few months, she did not suspect pregnancy. She has been taking a combined oral contraceptive pill, although she forgets at least once weekly. She assures you her sexual encounters have been consensual. Two months ago, she broke up with her 'long-term' partner of one year, whom she is certain is the father of her child. Over the past few months, she has been feeling unwell from bouts of vomiting and increased somnolence. She has had prior vaginal infections in the past, although is unable to confirm the etiologies; the patient was reportedly cured after short courses of medical treatment. She ascertains the last infection was over one year ago and is currently asymptomatic.

You sketch contributing factors for late prenatal care among adolescents, intending to teach your trainee after this clinical visit.