

INFECTIOUS DISEASES
UNIVERSITY OF NEW MEXICO

1. Description

Goals

To understand and describe the following infectious complications of pregnancy:

A. Epidemiology

1. Describe the incidence/prevalence of infectious diseases in pregnancy and in the neonatal period.
2. Describe the impact of these diseases on maternal and child health.

B. Pathophysiology, Diagnosis, and Treatment

1. Describe the altered host factors in pregnant women, the fetus, and newborn predisposing them to infectious diseases.
2. Describe the genital tract flora during pregnancy.
3. Describe sources and possible influences leading to colonization and infection of the fetus and neonate with:
 - a. Bacteria
 - b. Viruses
 - c. Parasites and protozoa
4. Describe the pathophysiology, organisms, diagnostic evaluation, approach to treatment, and maternal/fetal/neonatal health consequences for the following infections. (include specific counseling about intrapartum management, mode of delivery and breastfeeding as appropriate):
 - a. Septic abortion
 - b. Chorioamnionitis
 - c. Endomyometritis
 - d. Urinary tract infections
 - e. Pneumonia
 - f. Surgical and nosocomial infection
 - g. Pneumonia
 - h. Mastitis
 - i. Listeria
 - j. Tuberculosis
 - k. Hepatitis A, B, C
 - l. CMV
 - m. HSV
 - n. Toxoplasmosis
 - o. Varicella
 - p. Parvovirus
 - q. Syphilis
 - r. HIV
 - s. Hantavirus pulmonary syndrome
 - t. Coccidiomycosis (Valley Fever)

- u. Plague
- v. Group A streptococcal infections
- w. Necrotizing infections and gas gangrene

C. Prophylaxis

1. Counsel patients regarding the following scenarios:
 - a. Immunizations in pregnancy and the puerperium
 - b. International travel and prophylaxis of various infections in developing countries
 - c. Exposure to emerging infections and bioterrorism
2. Explain the consequences of a maternal-fetal perinatal infection such as pre-labor chorioamnionitis for a subsequent pregnancy.
3. Describe prophylaxis strategies for:
 - a. sexually transmitted infections in pregnancy and/or at delivery
 - b. neonatal group B streptococcal sepsis.
4. Describe management when a susceptible pregnant woman or a newborn is exposed to common bacterial and viral pathogens.

2. Learner Objectives

Upon completion of the rotation, the Fellow will accomplish the following objectives as asked in the respective ACGME competency category:

A. Medical Knowledge:

1. Understand and discuss diagnostic tests, their indications and their test characteristics as related to the infectious agents listed above.
2. Understand and discuss antimicrobial agents and management for each of infectious diseases listed above.
3. Understand and discuss travel prophylaxis, immunizations in pregnancy, and prevention of perinatal GBS infection.

B. Patient Care and Procedure Skills:

1. Perform and/or interpret the diagnostic tests for infectious diseases during pregnancy.
2. Formulate appropriate management plans for any infectious complications of pregnancy:
3. Cite published effectiveness rates for any antimicrobial therapy
4. Explain frequency and types of side effects of all antimicrobial drugs and interventions
5. Discuss long-term continuation and compliance rates
6. Evaluate the level of evidence for success and complication rates
7. List costs of treatment regimens
8. Interpret diagnostic tests and demonstrate knowledge of the sensitivity, specificity, positive, and negative values for each test for each test:
9. Standard terminology, normal values, and test reliability

B. Practice-based Learning and Improvements:

1. Demonstrate ability to perform self-assessment and incorporate feedback into improving clinical practice
2. Critically analyze and understand the appropriate use of the diagnostic studies and clinical management plans formulated and identify areas for improvement

3. Use information technology to locate scientific studies from literature on the various diagnostic tests and management strategies for medical complications of pregnancy and pregnancy-specific conditions and apply these to improve practice and patient care

D. Interpersonal and Communication Skills: Fellows are expected to:

1. Demonstrate ability to communicate test results to patients and families
2. Use effective listening skills to elicit and then provide information to patients and families
3. Work effectively, interact, and communicate appropriately with referring providers.

E. Professionalism: Fellows are expected to:

1. Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population
2. Demonstrate respect, compassion, and integrity in interactions with patients, families, and other health care professionals
3. Demonstrate sensitivity and responsiveness to patient's culture, age, gender, and disabilities

F. Systems-Based Practice: Fellows are expected to:

1. Practice cost-effective healthcare and demonstrate knowledge of resource allocation that does not compromise quality of care, especially in the use of diagnostic tests
2. Coordinate patient care among different health care providers, including medical students, residents, nurse practitioners, certified midwives and referring family medicine physicians.