# WHNP Final Case Study

## Overview

Think about all you have learned in regard to taking care of adult patients and consider the case presentation that follows. Answer all the questions completely and use peer-reviewed evidence to support your answers.

## Visit 1

You are seeing Anna, a 19-year-old African American female, for a complaint of “stinky vagina” in your office today. She is a new patient, recently finished a course of antibiotics for a sinus infection, and is not sexually active (never has been). She reports she noticed the odor about a month ago, along with a gray discharge on her underwear. Her grandmother bought her a Summer's Eve douche and she used it with some relief weeks ago, but the relief lasted only a few days. She repeated the douche two more times and now states she has itchiness and thick white discharge in addition to the odor. She is worried something is “terribly wrong” with her now. Microscopic examination of the discharge revealed the usual bacteria but also large numbers of microbes, which appeared to be fungal organisms.

1. Based on patient history, signs and symptoms, and results of the microscopic examination, Anna is diagnosed with candidiasis. How did this occur?
2. Identify two other diseases that could present with itching and vaginal discharge and describe their pathophysiology.
3. After thinking about these diseases, do you agree with the candidiasis being the most likely? Why or why not?
4. Identify at least two additional risk factors for the development of candidiasis.

## Visit 2

Anna comes back to see you six months later for recurrent vaginal discharge. She discloses that she has recently become sexually active and is concerned that she might have a sexually transmitted infection (STI). She has had only one male partner, but they have since broken up and she heard through the grapevine that he had an STI, but she is not sure which one. She has a thin, white to gray discharge but not many other symptoms. She does endorse some dysuria, but that seems to come and go. Her period is also three days late.

1. Thinking about which STIs are most common in Anna’s age group, identify three different conditions that could be causing her symptoms and should be ruled out. Explain how the pathophysiology of each condition could cause the symptoms to develop.
2. Anna came in to be screened today because she had a recurrent vaginal discharge and was concerned for STIs. What if Anna had no symptoms? Could she still have an STI? Explain.
3. What can happen if STIs are left untreated? Identify two conditions or complications that can arise from untreated STIs and explain how they develop.

You complete urine testing in your office and the results come back positive for chlamydia. Anna is very upset. She asks if she needs to disclose this to her sexual partner or if she can safely assume that he knows he has it.

1. Does this diagnosis make her at increased or decreased risk for the conditions you identified in question 7? Explain your rationale.
2. Thinking about the pathophysiology and infectious characteristics of chlamydia, how will you answer Anna’s question regarding disclosure to her sexual partner?

Since her period is late, you also decide to test Anna for pregnancy. This comes back negative, and Anna is relieved. While you are waiting for the test results, she asks if the infection could pose a risk to a baby during pregnancy.

1. What risks does chlamydial infection pose to a woman and fetus during pregnancy? What about at delivery?

## Visit 3

Anna has recovered from chlamydia and is doing well. She has come to see you today with complaints of “burning when I pee,” along with urgency and frequency. She is working at a retail store and not able to drink lots of water or go to the bathroom easily during her shift. She has never had symptoms like this before. She does not have any abdominal pain or fever, and reports that this started two days ago, got worse yesterday, and is even worse this morning. You decide to check her urine to determine if she has a urinary tract infection.

1. What organism most commonly causes urinary tract infections in women?
2. Thinking about normal structure and function, why are women more susceptible to urinary tract infections than men?
3. Explain how the pathophysiology of this infection leads to the signs and symptoms Anna is exhibiting. In other words, what is causing her to feel the way she feels?
4. Identify three risk factors for the development of urinary tract infections in women. Does Anna exhibit any of these? Explain your rationale.