Challenging the Immune System: diagnosis and understanding the disease

Case 4: Martine- a college student’s life is going in one direction, but the road takes a turn

Part 1: Getting the call
For a few months now, Martine knew something was wrong with her. She had a fever, was tired, and had a constant headache. She thought, “How could I have not used a condom with him? I always am careful, but he pushed and got his way. What if I’m pregnant? I’m in college. I have plans. I want to go to nursing school. Well, this is it…the moment of truth. I could be having a baby.”

After three rings, she heard a woman’s voice on the other line. It was the nurse from her doctor’s office. She walked Martine through the tests that they took when she was in for her check-up. She told Martine her pregnancy test came back negative, but she failed the initial HIV screening test. The nurse told her that this was a preliminary result, and that she would need to come back to get more testing done in order to make a conclusive diagnosis.

Martine dropped the phone and began to sob. She didn’t know what to do. She didn’t want anyone to know, but she struggled to keep it in until her appointment the next day.

After a second round of blood tests, the nurse informed her that she was HIV positive.

Questions: before reading part 2, answer the following questions in groups. Jot down some notes while your group discusses.

1. What do you know about HIV? Where have you heard about it? Do you know anyone who is living with HIV/AIDS?
2. What does an HIV test measure? What are they looking for in the blood?

3. Homework/In class internet research:
   a. What are the other symptoms of HIV?
   b. What is the cause of HIV/AIDS?
   c. How else is HIV transmitted?
   d. What part of the immune system is involved?
   e. What are the treatment options?

**Part 2: Hearing all of the information**

Martine thought “I will have to take responsibility for this myself and get through it on my own. I can’t blame this guy or anyone else for what has happened. I’m scared, but I am strong and I can get through it.”

She wanted to know more and was eager to get treatment. During an appointment at the HIV/AIDS clinic, Martine listened and took notes while her counselor explained:

“Finding out that you are infected with HIV (human immunodeficiency virus) can be frightening, but now that you found out you can do your best to keep as healthy as possible. One way to fight your fear is to learn as much as you can about the disease. Knowing about HIV and AIDS (acquired immunodeficiency syndrome) will also help you take the best care of yourself. The good news is that you found out early. People who get treatment early have the best possibility to live longer healthier lives.

Even if you don’t have symptoms, you are still able to transmit the virus to others. Because the virus has entered your body, your own immune system is under attack. The virus multiplies in your lymph nodes and slowly begins to destroy your helper T cells (CD4 lymphocytes). You may remain symptom-free for eight or nine years or more. But as the virus continues to multiply and destroy immune cells, you may develop mild infections or chronic symptoms.

We will want to get you started on an HIV antiretroviral medication regimen. The aim of antiretroviral treatment is to keep the amount of HIV in the body at a low level. This stops any weakening of the immune system and allows it to recover from any damage.
that HIV might have caused already. There are many options, so you should go home and read all of the information here in these provided materials and then we will take action as soon as you are ready.”

Questions: Answer the following questions in groups. Jot down notes during your discussion.

1. What is Martine’s diagnosis? What is happening to her immune system?

2. What is the problem with having too few T cells in the blood?

3. What is the difference between HIV and AIDS?
4. What questions do you think Martine will have when she returns to the counselor to talk about her treatment options? Make a list of some important questions you would ask if you were her.