

Managing Comorbidities of HIV/AIDS

How to Receive CME Credit

To earn free CME credit for watching this program, you must complete this test online.

Go to www.discoveryhealthCME.com and follow the instructions to complete the post-test and evaluation online. You must be registered and signed-in in order to take the test online. Upon successful completion of the test and the evaluation, you will be asked to select your professional category and you will be able to print the appropriate credit certificate right from your computer.

CME Test Questions

Case # 1: A 38-year-old African-American woman presents to the emergency department with shortness of breath and cough of approximately 4 weeks duration. She states that she has felt “run-down” for a while and started to feel short of breath with exertion last month. This shortness of breath has now progressed to the point that she feels dyspneic at rest. She also reports a nonproductive cough, subjective fevers and chills, and malaise for the past 2 weeks. The patient has no significant past medical history, is on no chronic medications, has no allergies and does not smoke or use substances. She is in a long-term relationship with a man and states she is monogamous. On exam, she is hypoxemic and has fine rales throughout both lung fields. Her chest X-ray shows a diffuse interstitial reticulonodular pattern and her sputum cytology is positive for *Pneumocystis*. Her rapid HIV antibody test is positive. The patient is stunned and tearful when informed of her HIV status. She asks “I thought this disease mostly occurs in gay white men. Are you sure that that I have HIV?”

1. Of the 1 million HIV-infected individuals in the United States, approximately what percentage are racial or ethnic minorities (e.g. non-Caucasian)?
 - a. 25%
 - b. 50%
 - c. 65%
 - d. 75%

Case # 1 (continued): The patient states she has been monogamous with her boyfriend but admits that she has questioned his fidelity in the past. However, she goes to her primary care physician every year for routine check-ups and has never been asked to take an HIV test.

2. Which of the following recommendations by the CDC should lead to an increase in the diagnoses of unknown HIV infections?
 - a. Risk-based HIV testing of patients presenting to any health care setting
 - b. Routine testing of individuals presenting to any health care setting
 - c. HIV testing upon patient request and consent in any health care setting
 - d. Rapid HIV testing for all patients who present with pneumonia

Case # 2: A 28-year-old HIV-infected gay male presents to your practice for a routine visit. His CD4 count is 340 cells/mm³ and his viral load is 28,000 copies/mL. The patient is naïve to antiretroviral therapy and is now ready to start his first regimen. His HLA-B5701 test is negative and a baseline resistance test shows no significant mutations.

3. Which of the following are preferred as NRTIs in a first-line antiretroviral regimen?
 - a. Abacavir + lamivudine
 - b. Stavudine + lamivudine
 - c. Zidovudine + lamivudine
4. If a protease inhibitor is chosen to be part of a first-line regimen, which of the following drugs should be included in the combination regimen?
 - a. Lamivudine
 - b. Zidovudine
 - c. Abacavir
 - d. Ritonavir
 - e. Tenofovir

Case # 3: A 58-year-old African-American male with chronic HIV infection on tenofovir/emtricitabine and lopinavir/ritonavir presents to your clinic after a recent hospitalization for a myocardial infarction. This regimen is the patient's first-line antiretroviral regimen and he did not have any viral resistance at baseline. He has a chronic history of hypertension, which has been well-controlled, and a prior significant smoking history. In the hospital, he was found to have an elevated cholesterol level to 246 mg/dL with an LDL level of 150mg/dL. His triglycerides were within normal range and his HDL was 46mg/dL. He was told in the hospital that his antiretroviral regimen caused his heart disease and should be stopped.

5. Which of the following should you do next? *More than one answer may be appropriate.
 - a. Start a statin to manage dyslipidemia
 - b. Stop the antiretrovirals only if his CD4 count is above 200
 - c. Stop the antiretrovirals only if the viral load is undetectable
 - d. Change the lopinavir/ritonavir to atazanavir/ritonavir

- e. Change the tenofovir/emtricitabine to abacavir/lamivudine

Case#3 (continued): The patient tells you that he developed his hypertension since being on his HIV medications. He asks you if changing his regimen may help his hypertension.

- 6. Which of the following antiretrovirals is associated with the development of hypertension?
 - a. Tenofovir
 - b. Emtricitabine
 - c. Abacavir
 - d. Lopinavir
 - e. None of the ARVs seem to lead to the development of hypertension

Case # 3 (continued): You note that the patient's creatinine is 1.6mg/dL and has been steadily rising over the past 6 months.

- 7. Which of the following medications is associated with the development or exacerbation of renal insufficiency in patients with HIV disease?
 - a. Tenofovir
 - b. Emtricitabine
 - c. Abacavir
 - d. Lopinavir
 - e. Fosamprenavir

Case # 4: A 34-year-old Latina chronic intravenous heroin user presents to your practice for initial management. He was recently diagnosed with HIV infection and chronic hepatitis C infection. His CD4 count is 220 cells/mm³ and his viral load is 54,500 copies/mL. The patient tells you that he is recently homeless and has been living alternatively with friends and in shelters. He uses heroin almost daily and tells you that he cannot take treatment for hepatitis C right now "because I am not going to do those shots and get more sick". You advise him to start treatment for his HIV infection and counsel him on the importance of adherence to his regimen.

- 8. Which of the following strategies would be most effective in helping this patient adhere to his antiretroviral therapy?
 - a. Use of a Mediset to help organize his pills
 - b. Helping the patient find a stable housing situation
 - c. Encourage treatment for his hepatitis C infection first to show the patient he can achieve success with one of his viral infections
 - d. Registering the patient for a needle exchange program

CME Evaluation

Managing Comorbidities of HIV/AIDS

In your experience, which of the following is the most significant barrier to the management of patients with HIV?

- a. Short-term toxicities of the antiretrovirals
- b. Long-term toxicities of the antiretrovirals
- c. Patient adherence to the regimens
- d. Immune reconstitution syndrome
- e. Co-morbidities in HIV-infected patients

How many patients do you see per week with HIV?

Less than 5

- a. 6-10
- b. 11-20
- c. Greater than 20

Degree

- a. MD/DO
- b. Other (Specify _____)

Specialty

- a. Infectious Disease
- b. Internal Medicine
- c. Other (Specify _____)

Please tell us how you found out about Discovery Health CME.

- Email Invitation Television Promo
- Internet Search Engine
- Journal Ad (Please Indicate): _____
- Other (Please Indicate): _____
- Other (please indicate): _____