

# Hepatitis B in Patients Coinfected with HIV

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This month's quiz is based on the article "Hepatitis B in Patients Coinfected with HIV," which begins on page 17 of this issue. Choose the single best answer for each question.

- Which of the following is the preferred therapy for HIV/hepatitis B virus (HBV) coinfecting patients who require treatment for hepatitis B but for whom HIV treatment is not desired?**
  - Emtricitabine
  - Entecavir
  - Lamivudine
  - Pegylated interferon
  - Tenofovir
- A patient coinfecting with HIV/HBV presents to the emergency department with a 2-day history of right upper quadrant pain, vomiting, and mild jaundice. Preliminary laboratory studies reveal markedly elevated liver function studies. His HIV viremia has been under control with combination antiretroviral therapy for the past 2 years with tenofovir/lamivudine and efavirenz. The patient has been unable to refill his medications for the past week because of a problem with his health insurance. Hepatitis serologic tests from the previous year showed that he is positive for hepatitis B surface antigen, hepatitis B e antibody, and hepatitis A IgG. His CD4 cell count has been steady over the past 2 years at 300 to 350 cells/mm<sup>3</sup>. What is the most likely cause of his current presentation?**
  - Acute hepatitis A infection
  - Hepatitis B e antigen seroconversion
  - Hepatitis flare due to antiretroviral therapy
  - Hepatitis flare due to discontinuation of agents effective against HBV
  - Immune reconstitution syndrome
- In a patient newly diagnosed with HIV/HBV coinfection who has a CD4 cell count of less than 50 cells/mm<sup>3</sup>, which of the following is part of an appropriate management strategy?**
  - Defer vaccination for HBV until his CD4 cell count is higher
  - Obtain an HBV genotype to guide management
  - Start lamivudine for treatment of HBV
  - Start zidovudine, didanosine, and efavirenz for treatment of his HIV
  - Withhold sulfamethoxazole/trimethoprim for *Pneumocystis* prophylaxis due to potential hepatotoxicity
- In the developing world, what is the most common mode of acquiring chronic HBV infection?**
  - Contaminated blood products
  - Intravenous drug use
  - Occupational exposure
  - Perinatal transmission
  - Sexual transmission
- What is the estimated prevalence of HIV/HBV coinfection in the United States?**
  - 2%
  - 10%
  - 25%
  - 35%
  - 75%
- A 35-year-old woman who was recently diagnosed with HIV presents for an initial evaluation. A viral hepatitis profile to rule out coinfection with hepatitis B and C is positive only for hepatitis B core antibody. What is the next step in the management of this patient?**
  - Measure alpha-fetoprotein to rule out hepatocellular carcinoma
  - Obtain an HBV genotype
  - Refer for liver biopsy
  - Vaccinate against hepatitis A only
  - Vaccinate against hepatitis B and measure HBV-DNA level

For answers, see page 48.

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1. **Answers to the Clinical Review Quiz, which appears on page 42. The article on hepatitis B in patients coinfecting with HIV begins on page 17.**

(D) Pegylated interferon

2. (D) Hepatitis flare due to discontinuation of agents effective against HBV

3. (A) Defer vaccination for HBV until his CD4 cell count is higher

4. (D) Perinatal transmission

5. (B) 10%

6. (E) Vaccinate against hepatitis B and measure HBV-DNA level

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