Case History of a PrEP Patient

A 28-year-old African-American woman visits her primary care physician (PCP) for evaluation following unprotected vaginal intercourse two weeks previously with a new male partner of unknown HIV status. Although she has no symptoms of sexually transmitted infection (STI), she wishes to be checked. She had received a negative HIV test result about six weeks ago. Physical examination is normal and tests are performed for gonorrhea, chlamydia, trichomonas, syphilis, and HIV. The patient mentions that she has had five to seven different sex partners each year for the past couple of years. Most of her partners use condoms, but some do not. She is taking oral contraceptives. She then mentions that one of her friends is taking pre-exposure prophylaxis (PrEP) medication and asks whether she should as well. After calling the national PrEPline at 855-448-7737 for additional information, her physician tells her she is eligible for PrEP and explains how this is one way she can provide herself with additional prevention from HIV, in addition to practicing safer sex. Her physician also reminds her that post-exposure prophylaxis (PEP) medication should be taken as soon as possible after at-risk exposures if she chooses not to take PrEP medication.

The Importance of PrEP in HIV Prevention

Primary care providers are at the forefront of efforts to reduce the number of new HIV infections, which have continued at about 50,000 annually for more than a decade.1 Prescribing medication along with counseling for healthier lifestyle choices is becoming a common primary care intervention to prevent HIV acquisition.

The Centers for Disease Control and Prevention (CDC) estimates that 1.2 million persons in the United States participate in sex or injection drug behaviors that place them at substantial risk for acquiring HIV infection.2 The use of once-daily oral antiretroviral prophylaxis, or pre-exposure prophylaxis (PrEP), has been proven both safe and highly effective in reducing HIV infection for heterosexual active women and men; gay, bisexual, and other men who have sex with men; and people who inject drugs (PWID) not prescribed to them. The Food and Drug Administration (FDA) approved PrEP as an indication for daily coformulated tenofovir disoproxil fumarate and emtricitabine (Truvada) in 2012 and CDC issued clinical practice guidelines for PrEP in 20142. Since then, the number of persons prescribed PrEP has been increasing steeply.3,4

Primary Care Providers Play a Key Role in Patient Selection

Most persons without HIV infection receive health care in primary or urgent care settings. Consequently, primary care providers are optimally positioned to identify patients who have indications for PrEP2 (see the table), including sexually active adults with infrequent condom use and multiple recent sex partners, those with recent sexually transmitted infections (STIs), and men or women with a sex or injection drug use partner known to have HIV infection.2

Ease of Providing PrEP

Providing PrEP is no more complicated than other commonly prescribed primary care prevention methods, such as aspirin, statins, oral contraception, or metformin for continued on page 2
prediabetes. Initiating PrEP is straightforward (see the figure). Before prescribing Truvada for PrEP, a brief medication and health history and laboratory tests are required to exclude contraindications to safe use of Truvada, undiagnosed HIV infection, or significant renal dysfunction. Additional testing is recommended for patients at risk for specific health conditions such as pregnancy and STIs. Counseling is also indicated about the importance of consistent daily dosing and the possible side effects and their management. Patients should be seen every three months to assess medication adherence and for repeat HIV testing. Periodic screening for unrecognized STIs and renal function is also necessary.

**Steps in PrEP Care**

**Prescribing PrEP**

- **At substantial risk**
  - Support medication adherence
  - Schedule follow-up visit within 3 months

- **No (acute) HIV infection**
  - Prescribe PrEP
  - Clinical Considerations: Comorbidities, Medications

- **Normal renal function?**
  - (eCrCl)
  - Provide/referral for risk reduction services, e.g., medication-assisted treatment (MAT)

- **IF HIV infection confirmed:**
  - Begin treatment, test for resistance

- **When indicated:**
  - assess hepatitis B status
  - assess pregnancy status

**Key Screening Questions**

### Assessing Sexual Risk

- Have you had sex in the past 6 months?
  - If yes, with how many partners?
    - With men, women, or both?

- How often did you use condoms with these partners?
  - As far as you know, do any of your partners have HIV infection?
    - If yes, are you considering having a baby in the next few months?

- Have you been treated for an STD?
  - If yes, do you know which STD you had?

### Assessing Injection Drug Use Risk

- Have you ever injected drugs that were not prescribed for you?
  - If yes, have you injected drugs in the past 6 months?
    - Did you use needles or injection equipment after they had been used by someone else?

**Frequently Mentioned Provider Concerns about PrEP**

While PrEP is new to many primary care providers and their patients, trials and observational studies have shown repeatedly that for persons without HIV infection, taking daily Truvada for HIV prevention is safe. No clinically significant renal, bone, or other toxicity has been reported. Some decreased condom use has been reported among persons starting PrEP because of prior inconsistent condom use, and continued high STI rates are seen after PrEP is started among persons at sexual risk for HIV infection. Increased STI screening may contribute to this finding. Regular STI screening (and treatment when needed) is an important part of PrEP care.

Because of the high effectiveness of daily PrEP use, HIV infections are uncommon in clinical practice. When they do occur, almost all infections have been in persons not taking the medication as prescribed. Infection with virus that has mutations associated with emtricitabine or tenofovir resistance is rare among the few persons infected with HIV after starting PrEP.

**Paying for PrEP**

PrEP medication and associated clinical care is covered by nearly all private, employer, and public insurance. PrEP may require prior authorization, often to ensure that testing has excluded HIV infection prior to prescription. For persons with insurance, assistance with copays and coinsurance is available. For uninsured persons with low income—such as household income less than 500% of the federal poverty level—medication assistance is available, with an application that must be completed by the physician. A billing guide for physicians is available.

**Conclusion**

All primary care providers have the opportunity to provide PrEP, a critical HIV prevention measure for patients at substantial risk of HIV infection. Providing PrEP is well within the scope of primary care practice, especially with the many resources available for both patients and physicians.
with questions about delivering PrEP for the first time. Primary care providers address a remarkably broad range of prevention and treatment options for their patients every day, and providing PrEP for at-risk HIV-uninfected patients can be another powerful primary care tool.

References