



The Graying of HIV Disease

The introduction of highly active antiretroviral therapy (HAART) in the mid-1990s transformed HIV from an all-but-certain killer to a manageable chronic condition.

While HIV-positive patients could have expected to live just a year or two in the pre-HAART era, it is common today for people on HAART to reach their 70s and beyond. As of 2015, more than half of those infected with HIV in the U.S. were age 50 or older.¹

Testing recommended for everyone

The graying HIV population includes both patients infected for many years and those with newly acquired HIV.

The Centers for Disease Control and Prevention (CDC) estimates that in 2013, 21% of new diagnoses of HIV and 27% of new AIDS cases occurred in people aged 50 or older. More than a third (37%) of deaths related to AIDS in the U.S. now occur among people aged 55 or older, and older people are also more likely to be diagnosed with HIV later in the course of their disease.²

“Older patients may not recognize their risk. And providers may not be asking older patients about their risk factors or testing them,” says Jonathan Appelbaum, MD, of the American Academy of HIV Medicine.

The CDC recommends that everyone be tested for HIV at least

once in their lifetime. “If a patient over the age of 50 has never had an HIV test, they should get one,” says Dr. Appelbaum, who is a professor of internal medicine at Florida State University College of Medicine.

Diseases of aging occurring earlier

While the increased life expectancy of people living with HIV represents one of the biggest medical success stories of the last century, it has also brought new challenges to clinicians treating infected patients.

While it’s no surprise that older patients with HIV develop diseases associated with aging such as hypertension, coronary artery disease, heart disease, and diabetes, it now appears that they may be developing them earlier and at higher rates than people without HIV, says Wayne McCormick, MD, MPH, a geriatrician and professor of medicine at the University of Washington.

“They may also,” he adds, “be developing more complications from these conditions—not because they’re aging more quickly, but because they have a chronic inflammatory condition that’s hard on the body over decades. People on the best HIV therapies still have chronic inflammation.”

AIDS-related opportunistic diseases like Kaposi’s sarcoma and pneumocystis pneumonia, which characterized HIV illness in the decade prior to the introduction of HAART, have been replaced by diseases of aging that are not as obviously associated with HIV infection. Specialists who best understand the nuances of antiretroviral therapy may therefore be less comfortable treating these increasingly prevalent diseases in their HIV- positive patients, Dr. McCormick says.

Dr. McCormick says that clinicians caring for patients with HIV need to be ready to address multiple medical problems that may not seem obviously related to HIV illness—at least initially. But some of these actually could be linked to HIV because they’re the result of a chronic inflammatory state.

Liver disease now leading killer

HAART, while very effective against HIV, has its potential downsides. For one thing, liver disease has emerged as a leading cause of illness and death among older HIV-infected patients on HAART.³Certain antiretroviral therapies have been associated

with liver toxicity, and chronic inflammation is also believed to play a role in liver disease in HIV-positive patients.

Cross-sectional studies have shown unexpectedly high rates of advanced fibrosis in HIV-infected patients who didn't have viral hepatitis or a history of alcohol abuse, suggesting that HIV or long-term use of antiviral therapy may independently contribute to liver damage.⁴

In a recent review of the research examining liver fibrosis in HIV, investigators concluded that as the HIV-infected population gets older, "aging of the liver in HIV may play a much more pivotal role . . . considering age-related effects, coinfection with hepatotropic viruses, and the toxicity of long-term antiviral treatment."⁴

Cancer, dementia are also concerns

HIV-infected patients have a higher risk for certain cancers than the general population, and this is especially true among older patients. A recent case-cohort study found HIV infection in the elderly to be associated with a higher risk for many cancers associated with HIV infection than in younger populations.⁵

Over a 1-year period, 2.5% of the HIV-infected elderly cohort received a cancer diagnosis, and by 5 years, this had increased to 10.2%.⁵

And while AIDS-related dementia is now relatively rare, a much more subtle form of cognitive impairment associated with HIV infection is now being recognized. A recent review of HIV-associated neurocognitive disorders found that comorbid conditions appear to contribute to cognitive impairment associated with HIV infection, but don't fully explain it.⁶

Another study, published in 2011, found persistent evidence of brain atrophy in HIV-infected men on HAART.⁷ This atrophy occurred in the basal ganglia.

"The volume of the basal ganglia was inversely associated with the time since first seropositivity, suggesting that either there is a chronic, subclinical process that continues in spite of therapy, or that the extent of the initial insult caused the extent of atrophy," the researchers wrote.⁷

While HIV in the HAART era may well be a chronic condition, it is one that typically includes multiple, serious comorbidities in aging patients, says Dr. Appelbaum, who believes that primary care

physicians and geriatricians who routinely treat these conditions also need to have a good understanding of HAART.

“The population is expanding, so I think almost any primary care physician is going to have patients in their practice who are older and infected with HIV,” he says. “In the past, the message to patients has been that they need to see a specialist if they’re HIV-positive, but that’s not really true anymore.” What is important is they be treated by a physician who has a good overall understanding of the complexities of HIV disease.

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