

HIV Patients as Overweight as General Population

BY DOUG BRUNK
San Diego Bureau

SAN DIEGO — In the 1980s, patients with HIV/AIDS commonly lost an excessive amount of weight, a process known as wasting.

But today, these patients are becoming just as overweight and obese as the general population of the United States, Dr. Nancy F. Crum-Cianflone reported at the annual meeting of the Infectious Diseases Society of America. A study of 663 HIV-positive patients treated at two U.S. Navy clinics revealed that 63% were overweight or obese.

According to the Centers for Disease Control and Prevention, 66% of the general population in the United States is overweight or obese.

"HIV patients now look like the general population in terms of weight," said lead author Dr. Crum-Cianflone, an HIV research physician with the TriService AIDS Clinical Consortium in San Diego. "Because of our study findings, we believe that HIV physicians should be advised to watch the weight of their patients very carefully and help them maintain normal, healthy weight."

In 2005, she and her associates collected data from 663 HIV patients at Naval Medical Center in San Diego and National Naval Medical Center in Bethesda, Md., including duration of HIV infection, CD4 count, viral load, antiretroviral therapy, diabetes, and hypertension.

They defined wasting as a body mass index of less than 20 kg/m², overweight as

a BMI of 25-29.9, and obesity as a BMI of 30 or greater.

The mean age of patients was 41 years, and 50% were white, 26% had hypertension, and 8% had diabetes. Some had been followed in the clinics since 1986.

Of the 663 patients, 46% were overweight, 17% were obese, and 3% met the definition of wasting. None of the study participants met the strictest criteria for wasting, which is a BMI of 18.5 or less.

At the time of diagnosis, 46% were overweight or obese. Over the course of their infection, 72% gained weight.

On multivariate analysis, two significant predictors of increasing BMI emerged: younger age at HIV diagnosis and longer duration of HIV infection.

"We also learned that people who gained weight were more likely to have high blood pressure," Dr. Crum-Cianflone said during a press briefing. "We believe that the excessive weight gain that they experienced contributed to the development of high blood pressure."

Patients with high CD4 counts also were more likely to be overweight than were those with lower CD4 counts.

No association was observed between the use of highly active antiretroviral treatment (HAART) and weight gain.

Specific reasons for the rise in obesity among HIV patients are unclear. Dr.

Crum-Cianflone said it may partly have to do with the fact that with improved HAART, HIV has essentially become a chronic condition with lower rates of comorbid infections and a longer expected life span.

HIV patients are living "healthier lives and are not dying from life-threatening infections or developing wasting," she noted. "Rather, they have now become like the general population in terms of their weight."

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DR. CRUM-CIANFLONE

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"Although our study was small, we can probably begin to reassure people living with HIV who are over the age of 50 and clinicians looking after them that comorbidities and toxicities to medications, such as dyslipidemia, diabetes mellitus, and osteoporosis, may not be increased compared to the general U.S. population as it ages," lead study author Dr. Nur Onen said in an interview at the meeting. "Therefore, other factors such as lifestyle and aging itself may be the most important in long-term health."

She and her associates compared the incidence of heart disease, diabetes, high blood pressure, osteoporosis, and other conditions between a group of 70 HIV-positive patients aged 50 and older on HAART and a group of HIV-negative controls from the National Health and Nutrition Examination Survey matched by age, gender, race, smoking status, and BMI.

The mean age of patients was 56 years, 86% were male, and 66% were white. Their mean BMI was 25, and 90% were on HAART (a mean duration of 7 years, 91% with full viral suppression).

Dr. Onen, an infectious diseases fellow at the university, reported that although the prevalence of hypertension was significantly higher among HIV-positive patients, compared with controls (51% vs. 31%, respectively), there were no differences in the prevalence of heart disease (10% vs. 14%), diabetes (13% vs. 11%), or osteoporosis (2% in each group). The 10-year risk for coronary heart disease based on the Framingham risk scores also was similar between the groups.

The researchers found that HIV-infected patients had significantly higher triglyceride levels, compared with controls, but lower LDL cholesterol and glucose levels.

Older patients with HIV represent "an increasingly important population," Dr. Onen said. "By 2015, one in two people with HIV will be over the age of 50. Expect a large increase. They're here to stay, the treatments are good, and the treatments are becoming less and less toxic."



In HIV, Antisocial Personality Disorder Blunts Therapy Benefits

BY KATE JOHNSON
Montreal Bureau

MONTREAL — Comorbid antisocial personality disorder blunts the brain dysfunction associated with HIV/AIDS but also blunts the brain benefits associated with antiretroviral therapy, reported Lance Bauer, Ph.D., professor of psychiatry at the University of Connecticut, Farmington.

"There is good evidence that both ASPD [antisocial personality disorder] and HIV affect the same regions of the brain," he said at the annual conference of the EEG and Clinical Neuroscience Society.

The prevalence of ASPD is disproportionately high in the HIV/AIDS population, with one study estimating it as high as 74%, making it important to screen for this psychiatric disorder, he said in an interview. The diagnosis of ASPD "may provide a context for the treatment plan. Such patients may require more frequent follow-ups to deal with compliance issues or may require a more structured approach for their treatment—for example, greater involvement of the spouse or fam-

ily member, or simplifying the treatment regimen."

In his published study, which he presented at the meeting, Dr. Bauer compared the effect of ASPD on brain function in 26 treated and 71 untreated HIV patients, compared with 68 seronegative controls using the P300 event-related potential (ERP) test (*Neuropsychobiology* 2006; 53:17-25).

Using ERP, previous studies have shown increased P300 latency and decreased P300 amplitude associated with untreated HIV. These changes in P300 suggest a subtle underlying dysfunction in the brain that sometimes is accompanied by slowing of motor skills and information processing, as well as impaired attention or memory skills, according to Dr. Bauer. These abnormalities have been shown to be reversible with antiretroviral therapy.

Similarly, in ASPD patients, previous P300 ERP studies have revealed decrements in frontal brain structure and function.

Dr. Bauer's study confirmed previous findings in that ASPD was associated with frontal brain dysfunction, both in HIV-

negative and HIV-positive patients on antiretroviral therapy.

But among untreated HIV patients, ASPD appeared to have no deleterious effect on brain function. "ASPD may initially compromise the function of this region to such a degree that the additional effects of untreated HIV/AIDS are blunted," he suggested.

In addition, among HIV-positive patients, ASPD blunted the ability of antiretroviral therapy to reverse brain dysfunction. This is probably related to the effect of ASPD in diminishing the capacity of the nervous system "to respond to the presence of medications that would normally improve frontal brain function," Dr. Bauer said.

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