ABSTRACT

Background: Obesity and HIV infection are ongoing epidemics in the U.S. Obesity predisposes to diabetes and cardiovascular disease, which are complications also associated with HIV infection or by itself contribute to morbidity and mortality. Combined obesity and HIV are a major public health concern requiring further study and intervention.

Methods: Retrospective cross-sectional study of the 1763 patients enrolled in the University of Pennsylvania Center for AIDS Research Clinical Core Registry (CFAR-CCR) began in 1999 at the Hospital of Univ. of Penn, two affiliated hospitals and the Philadelphia VA.

RESULTS

Combined prevalence of obesity and overweight in cohort: 46%. Combined prevalence in African American women: 62.1%.

CONCLUSION

Obesity is 5 times more common than wasting in the current therapeutic era, while the combined 45% prevalence of OW and OB within our population is less than the overall 60% population prevalence for the state of Pennsylvania, it is nonetheless of epidemic proportion. Women, particularly those of color at an even higher risk. Baseline or acquired obesity might be a significant contributor to the metabolic abnormalities associated with HIV or treatment. For patients with HIV, longer, healthier survival rates, higher CD4 counts and increased risk of antiretroviral regimens and obesity-related complications may contribute to morbidity. Specific dietary and lifestyle modifications to counter this will be needed in this population.

INTRODUCTION

The incidence of obesity is continuing its epidemic increase in the U.S.

Greater than 20.0% of American adults fulfill the definition of obesity, with a BMI of ≥ 30 kg/m² while more than half of U.S. adults are considered overweight, with BMIs ≥ 25 kg/m².

While some HIV-infected patients are still affected with wasting, we have observed that obesity is becoming a significant issue in our HIV-infected patients.

METHODS

Cohort description:

Enrollment in Univ. of Penn CFAR Clinical Core Cohort Registry (CFAR-CCR) began in 1999 at the Hospital of Univ. of Penn, two affiliated hospitals and the Philadelphia VA.

Methods:

Abstract number: Q-122 Valeriana Amorosa, MD; Marie Sweeney, MS, MD; Robert Gross, MD, MSCE; Ian Frank, MD; Harvey Friedman, MD; Rob Roy MacGregor, MD; Debbie Gudonis, LPN; Pablo Tebas, MD.

Figure 1: Prevalence of obesity in women was 28.5% vs. 10.6% of men.

Methods:

Statistical analyses:

Prevalence in each category as percentages of cohort.

Univariate analysis for association with obesity, χ² test to calculate relative risk (RR) and 95% CI for each variable.

Stratified analyses for men and women.

Multivariate analysis with forward step-wise multiple regression model including all variables associated with overweight/obesity with p<0.05.

Comparison with overall prevalence of overweight and obesity in Philadelphia adults stratified by race and gender.

Multivariate analysis with forward step-wise multiple regression model including all variables associated with overweight/obesity with p<0.05.

Comparison with overall prevalence of overweight and obesity in Philadelphia adults stratified by race and gender.

CONCLUSION

Obesity is 5 times more common than wasting in the current therapeutic era. While the combined 45% prevalence of OW and OB within our population is less than the overall 60% population prevalence for the state of Pennsylvania, it is nonetheless of epidemic proportion.

Women, particularly those of color at an even higher risk. Baseline or acquired obesity might be a significant contributor to the metabolic abnormalities associated with HIV or its treatment.

Further study of the heterogeneous interplay of genetic, behavioral and environmental factors responsible for obesity and not fully explored in this model is warranted.

As patients with HIV live longer, obesity-related complications may contribute to morbidity. Specific dietary and lifestyle modifications to counter this will be needed in this population.

Figure 2: Combined prevalence of obesity and overweight stratified by age (A), sex and race (B) within our cohort compared to the city of Philadelphia.

Figure 3: Combined prevalence of obesity and overweight stratified by age (A), sex and race (B) within our cohort compared to the city of Philadelphia.

Figure 4: Comparison of combined prevalence of obesity and overweight between our cohort and the city of Philadelphia.