RESULTS

Among 234 deaths, most were from cancer (82% in HIV-infected vs. 93% in HIV-uninfected women); only 9% of HIV-infected women died of AIDS, while 16% of HIV-uninfected women died of AIDS. The probability of HIV-infected patients dying of AIDS was elevated (35%) when compared to HIV-uninfected patients (5%). The probability of death from cancer was 49% for HIV-infected and 36% for HIV-uninfected women.

We found a trend in the association of HIV infection with overall survival; 35% and 49% of HIV+ and HIV- patients, respectively, were alive in 5 years. However, when we adjusted for clinical stage, the odds of dying associated with HIV infection lost significance (HR = 1.29, 95% CI 0.95-1.75). We observed a strong association (p = 0.001) of HIV infection with the risk of recurrence after complete treatment for cancer (HR = 3.46, 95% CI 1.80-6.65), and this association even remained after adjustment by clinical stage of the tumor. HIV-infected patients had a less disease-free survival compared to HIV-; 47% and 88%, respectively.

METHODS

Study cohort of 87 HIV-infected and 336 HIV-uninfected women with cervical cancer. Patients at the Brazilian National Institute of Cancer (2001–2013) were matched on age, calendar year of diagnosis, clinical stage, and tumor histology. Stage and treatment with surgery, radiotherapy, and chemotherapy followed international guidelines. We used a Markov model to assess responses to initial therapy, and Cox models for mortality and relapse after complete response.

INTRODUCTION

Human immunodeficiency virus (HIV) infection increases the risk of many malignancies. In people infected with HIV, cancer occurs at a younger age and in many cases at advanced stages at the time of diagnosis. With the introduction of HAART in 1996, there was a significant increase in the life expectancy of people living with HIV. These individuals, who have died relatively young, are now aging and therefore the risk of developing diseases due to the aging process has become increasingly evident in this population. Cervical cancer is an important cause of morbidity and mortality in HIV-infected women. As HIV-infected people are living longer, many HIV-infected women diagnosed with CCU will not die of AIDS and therefore it is important to understand the impact of HIV on the prognosis of cancer in patients who have received treatment for it. We evaluated mortality, response to treatment and relapse among HIV-infected and HIV-uninfected women with cervical cancer in Rio de Janeiro, Brazil.

CONCLUSIONS

Among women with cervical cancer, HIV infection was not associated with initial treatment response or early mortality, but relapse after attaining a complete response and late mortality were increased in those with HIV. These results point to a role for an intact immune system in control of residual tumor burden among treated cervical cancer patients.

Acknowledgement: CAPES, FAPERJ, CNPq and NCI