
Breast cancer and HIV

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Reddy et al. present a worthy and timely review on breast cancer in HIV-infected patients.¹ There is clearly a paucity of robust data on this important and common simultaneity. Some older retrospective reports describe mainly experiences of the pre-antiretroviral era. This information is outdated. Some good epidemiological studies have recently been published, such as that from Soweto by Cubasch et al.² As pointed out by Reddy et al. there is a great dearth of knowledge that would come from prospective studies of the management of breast cancer in HIV-infected patients. Intuition might dictate that the outcome of both surgical and adjuvant treatment of breast cancer in these patients would be poor because of the effect on immunity.

We recently published a prospective cohort study which compared the treatment outcomes of breast cancer in HIV-infected and -uninfected patients.³ This was published after the collection of data by Reddy et al. In our study, surgical complications were not more common in HIV-infected patients and the patients tolerated chemo- and radiotherapy as well as did HIV-uninfected patients. Local surgical outcomes did not differ statistically between the two groups and in fact less wound infections occurred in the HIV-infected patients. We thus found that the outcome of breast cancer treatment in HIV-infected patients using standard protocols was probably not poorer than in HIV-uninfected patients. Our study included 160 patients and a larger study is needed to confirm (or refute) these findings.

Protocols and guidelines need to be developed for the management of HIV-infected patients with breast cancer. Currently available information is insufficient for this

purpose. It is incumbent on researchers in sub-Saharan Africa to perform the necessary studies where the greatest burden of HIV infection is and where the coincidence with breast cancer is most common. Apart from broad clinical studies such as our own, more basic research would be beneficial, such as the study of the interaction of the human immunodeficiency virus, breast cancer cells, antiretroviral drugs and the immune and inflammatory responses in this setting. An intriguing aspect is the suggestion of a positive modulatory role of the HI virus in surgical wound infection, as seen in our study. It is postulated that HIV-infection induces a heightened or activated state of immune and inflammatory responses needed for wound healing and combatting wound infection. The proposed mechanism is, among others, the priming of macrophages and other leukocytes for the pro-inflammatory response state.⁴

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