Abstract:

The isolation and clinical use of anthracyclines and taxanes were major breakthroughs in cancer chemotherapy. Their use has lead to cures and palliation of patients with diverse cancer types, notably breast cancer, malignant lymphomas, ovarian cancer and acute leukaemia. More recently there have been efforts to exclude anthracyclines from early breast cancer protocols because of toxicity and also hypothesized lack of efficacy in non-Her2/Neu amplified, and by the extrapolation of non-topoisomerase II-α co-amplified tumours. We studied the records of 212 patients treated in three private oncology facilities in Nairobi with anthracycline-or taxane-containing protocols. In total, 225 treatment protocols were analysed since some patients were treated with more than one protocol. Breast carcinoma accounted for 61.8% of the cases, followed by non-Hodgkin's lymphomas, which accounted for 16.5%. Doxorubicin was used in 58.2% of the protocols, paclitaxel in 7.6% and docetaxel in 11.1%. Clinical cardiac toxicity was recorded in 4.6% of the protocols containing doxorubicin, none with paclitaxel and 12% with docetaxel. Neurotoxicity was recorded in 2 (1.5%) of the protocols with doxorubicin, 5 (29.4%) with paclitaxel and 4 (16%) with docetaxel. Fluid retention was not experienced with doxorubicin, but in 1 (5.9%) with paclitaxel and in 5 (20%) with docetaxel. Toxicity was not recorded in 93.9% of protocols with doxorubicin, 64.7% with paclitaxel and 52% with docetaxel. These differences were highly significant ($P < 0.001$). We conclude that non-haematopoietic toxicity of anthracyclines is more favourable than that of taxanes.