

## **Nadir neutrophil counts in patients treated for breast cancer with doxorubicin and cyclophosphamide**

Othieno-Abinya, NA; Nyabola, LO; Nyong'o, AO; Baraza, R

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### **Abstract**

Objective: To determine the impact on neutrophils if adriamycin is administered at 60 mg/m<sup>2</sup> and cyclophosphamide at 600/m<sup>2</sup> (AC 60/600); and at 50 mg/m<sup>2</sup> and 500 mg/m<sup>2</sup> (50/500) in the treatment of breast cancer. DESIGN: Restrospective analysis of nadir neutrophil counts in female mammary carcinoma patients treated with adriamycin/cyclophosphamide combination. SETTING: Hurlingham Oncology Clinic, Nairobi and The Nairobi Hospital between March 1995 and August 1999. SUBJECTS: Eighteen patients with breast cancer were treated either for adjuvant purposes or for metastatic disease. INTERVENTION: Chemotherapy with adriamycin and cyclophosphamide at 60/600 or 50/500. Patients were advised to avoid crowded places and given prophylactic broadspectrum antibiotics whenever grade 4 neutropenia occurred at nadir. RESULTS: Grade 3-4 neutropenia occurred in 75.5% of treatments at 60/600 and in 56.8% of the treatments at 50/500. Febrile neutropenia followed only one treatment and did not result in death. CONCLUSION: Neutropenia is frequent and severe at A/C 60/600 and need to be watched out for. Sepsis on the other hand is prevented if meticulous attention is given and corrective measures taken. A/C 50/500 was associated with less occurrences of neutropenia though still very high. Neutropenia should therefore be checked and steps be taken to prevent sepsis even at this dosage.