

Dose-modified oral chemotherapy in the treatment of AIDS-related non-Hodgkin's lymphoma in East Africa.

Abstract:

PURPOSE Africa is burdened by the AIDS epidemic and attendant increase in HIV/AIDS-related malignancies. Pragmatic approaches to therapeutic intervention could be of great value. Dose-modified oral chemotherapy for AIDS-related non-Hodgkin's lymphoma is one such approach. **PATIENTS AND METHODS** The oral regimen consisted of lomustine 50 mg/m² on day 1 (cycle 1 only), etoposide 100 mg/m² on days 1 to 3, and cyclophosphamide/procarbazine 50 mg/m² each on days 22 to 26 at 6-week intervals (one cycle) for two total cycles in HIV-infected patients with biopsy-proven non-Hodgkin's lymphoma. **Results** Forty-nine patients (21 in Uganda and 28 in Kenya) were treated. The majority of patients were female (59%) and had a poor performance status (63%); 69% of patients had advanced-stage disease; and 18 patients (37%) had access to antiretroviral therapy. In total, 79.5 cycles of therapy were administered. The regimen was well tolerated, had modest effects (decline) on CD4(+) lymphocyte counts ($P = .077$), and had negligible effects on HIV-1 viral replication. Four febrile neutropenia episodes and three treatment-related deaths (6% mortality rate) occurred. The overall objective response rate was 78% (95% CI, 62% to 88%); median follow-up time was 8.2 months (range, 0.1 to 71 months); median event-free and overall survival times were 7.9 months (95% CI, 3.3 to 13.0 months) and 12.3 months (95% CI, 4.9 to 32.4 months), respectively; and 33% of patients survived 5 years. **CONCLUSION** Dose-modified oral chemotherapy is efficacious, has comparable outcome to that in the United States in the pre-highly active antiretroviral therapy setting, has an acceptable safety profile, and is pragmatic in sub-Saharan Africa. The international collaboration has been highly successful, and subsequent projects should focus on strategies to optimize combination antiretroviral therapy and chemotherapy and follow-up tissue correlative studies