Abstract

Context: The natural course of HIV disease progression among resource-poor patient populations has not been clearly defined.

Objective: To describe predictors of HIV disease progression as seen at an outpatient clinic in a resource-limited setting in rural Ethiopia.

Design: This prospective cohort study included all adult HIV patients who visited an outpatient clinic at Arba Minch hospital in South Ethiopia between January 30, 2003 and April 1, 2004. Clinical and hematologic measurements were done at baseline and every 12 weeks thereafter until the patient was transferred, put on antiretroviral therapy, was lost to follow-up, or died. Community agents reported patient status every month.

Setting: A district hospital with basic facilities for HIV testing and patient monitoring.

Main Outcome Measures: Death, diagnosis of tuberculosis, and change in disease stage.

Results: We followed 207 patients for a median duration of 19 weeks (range, 0-60 weeks). A total of 132 (64%) of them were in WHO stage III. The overall mortality rate was 46 per 100 person-years of observation (PYO). Mortality increased with advancing disease stage. Diarrhea, oral thrush, and low total lymphocyte count were significant markers of mortality. The incidence of tuberculosis was 9.9 per 100 PYO. Baseline history of easy fatigability and fever were strongly associated with subsequent development of tuberculosis.

Conclusions: The mortality rate and the incidence of tuberculosis in our cohort are among the highest ever reported in sub-Saharan Africa. We identified oral thrush, diarrhea, and total lymphocyte count as predictors of mortality, and easy fatigability and fever as predictors of tuberculosis. The findings have practical implications for patient care in resource-limited settings.