

Abstract

OBJECTIVE:

To evaluate the extent of HIV-1 drug resistance among drug naive Kenyan individuals.

DESIGN:

Cross-sectional study.

SETTING:

Kenya Medical Research Institute HIV laboratory Nairobi, Kenya.

SUBJECTS:

A total of seventy eight HIV-1 positive drug naive subjects randomised from five Kenyan provincial hospitals between April and June 2004.

RESULTS:

A major non-nucleoside reverse transcriptase (NNRTI) an associated mutation was found in one patient (1.3%). NNRTI associated resistance mutations were present at amino acid codon sites G98A (2.56%); K103E (1.3%) and L100F (3.57%) prevalences. Baseline resistance may compromise the response to standard NNRTI-based first-line ART in 1.3 % of the study subjects.

CONCLUSION:

This indicates in general, that drug resistance among HIV-1 positive drug naive individual is at low thresholds (1.3%) but the problem could be more serious than reported here. Continuous resistance monitoring is therefore warranted to maintain individual and population-level ART effectiveness.