

A patient taking antiretroviral therapy who was found to be HIV negative

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Introduction

- Two months after arrival in the United Kingdom (UK), a 52 year old black African health worker was referred to the HIV clinic by his GP.
- He required a prescription for tenofovir, lamivudine and efavirenz.
- He described feeling intoxicated, bad dreams and dizziness.
- He reported two missed doses in the previous three months, was switched to Atripla and baseline monitoring was performed.
- Our plan was to review his results and to consider a switch from efavirenz based antiretroviral therapy (ART).

British HIV Association guidelines for the routine investigation and monitoring of adult HIV-1-positive individuals

4.3.3 Investigations

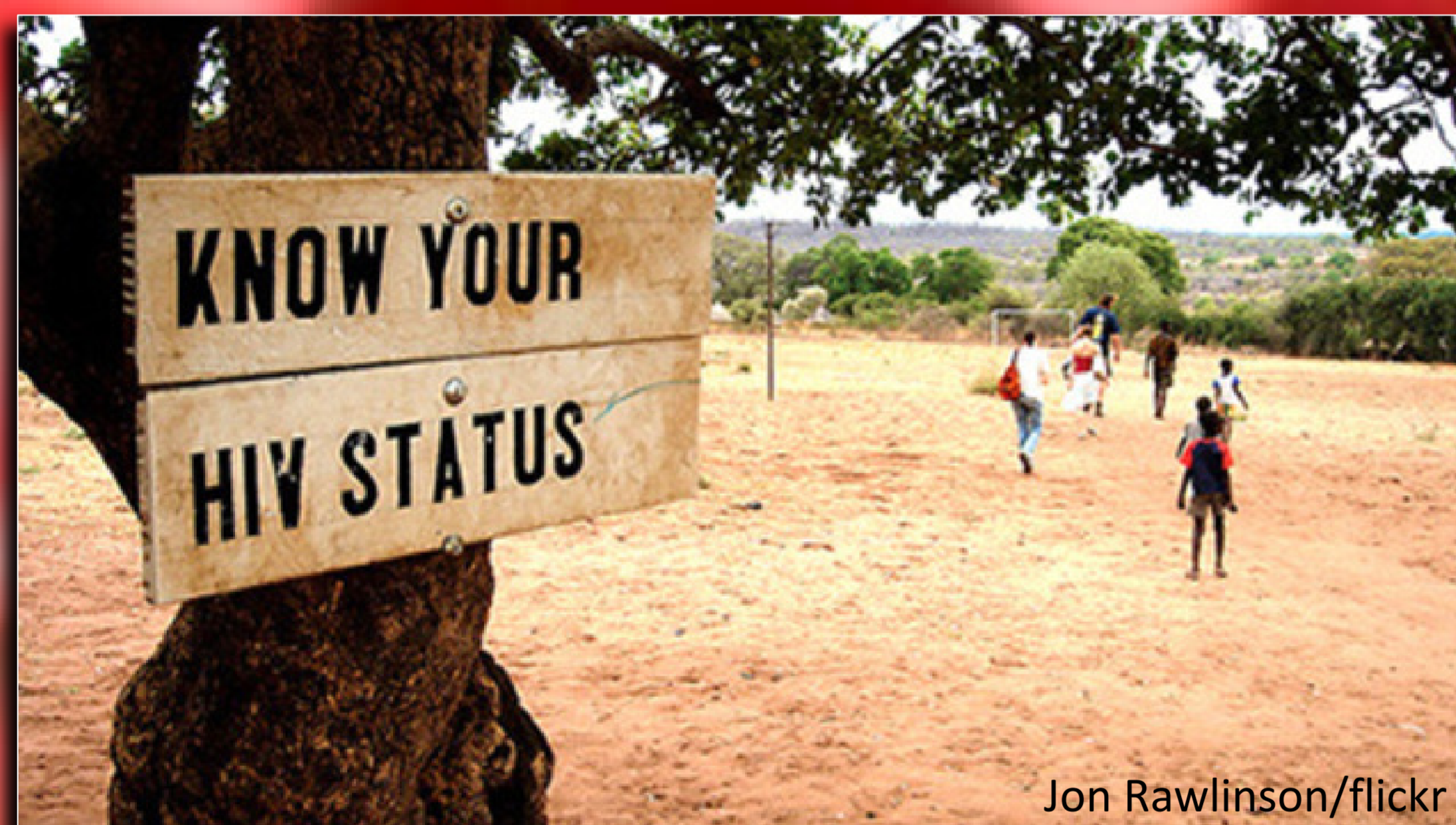
4.3.3.1 Confirmation of HIV status

Recommendations

- We recommend confirming HIV-positive serology. Confirm positive serology and distinguish between HIV-1 and HIV-2 infections.
- We recommend that new transfers should have written confirmation that HIV-2 infection has been excluded; otherwise another typing assay needs to be performed.

(BHIVA 2016)

Africa		United kingdom	
2001	Patient and fiancée (now wife) HIV negative.	Nov 2016	Attended HIV clinic Requires more ART Requests different ART: EFV side-effects Baseline monitoring test HIV 1 & 2 antibody/antigen: not detected HIV viral load < 40
2012	Patient and wife HIV positive Started tenofovir, lamivudine, efavirenz (EFV)	1 week	HIV 1 & 2 antibody not detected on point-of-care test HIV 1 & 2 and p24 antigen: Not detected
2017	Medical file review: No record of a HIV test or of ART initiation	2 weeks	Antiretroviral therapy stopped
		6 weeks	HIV 1 & 2 antibody not detected on point-of-care test HIV nucleic acid: Not detected
		10 weeks	HIV viral load < 40



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- The microbiology laboratory contacted the clinic when all HIV tests using two different fourth generation platforms showed HIV antibody/antigen (Ab/Ag) not detected.
- The patient returned to clinic for repeat sampling including testing for HIV proviral DNA.
- A third generation point of care test (POCT) showed HIV Ab not detected.

- We emailed his HIV physician in Africa who checked the patient record.
- This showed baseline haematology, biochemistry and hepatitis B results with no record of an HIV test or of ART initiation.

- Prior to marriage in 2001 he and his wife-to-be had HIV negative tests. In 2012 he and his wife attended a clinic where same-day-testing on venous samples resulted in both being diagnosed HIV positive.
- He reported that he did not have a confirmatory HIV test. He described no other sexual risks and had never had an occupational risk working in healthcare in Africa. The couple started ART shortly after diagnosis.

Discussion

- A PubMed search reveals reports of false positive HIV test results in African countries, e.g. Nyirenda (2011).
- After four years living as if with HIV the patient is adjusting to the news that he is HIV negative and that he has been taking unnecessary ART with side effects that have affected his quality of life.
- His wife is waiting to travel outside her country of residence for HIV testing in a setting where she will trust the result

Recommendations

This case reinforces the importance of confirming HIV-positive serology as recommended by BHIVA monitoring guidelines.

Acknowledgement

Thankyou to the patient who has read proofs of this poster and preferred not to name his country of origin.

References

- BHIVA 2016 British HIV Association guidelines for the routine investigation and monitoring of adult HIV-1-positive individuals <http://www.bhiva.org/documents/Guidelines/Monitoring/2016-BHIVA-Monitoring-Guidelines.pdf>.
- Nyirenda M, Kumwenda J, Kumwenda N 2011 HIV test misdiagnosis. Malawi Medical Journal : The Journal of Medical Association of Malawi. 2011; 23(4):122-123.