that which has been observed — essentially zero’. The theoretical risk of environmental transmission to human blood or other body fluids reduces the Control and Prevention: ‘... drying of HIV-infected HIV experts including the Center for Disease Control and Prevention: ‘... drying of HIV-infected human blood or other body fluids reduces the theoretical risk of environmental transmission to that which has been observed — essentially zero’.

An alternative, and in our view more plausible, explanation may be found in an examination of the specificity of the antibody tests. The only way to determine their specificity is to use HIV isolation as a gold standard. However, at present some of the best known HIV/AIDS experts agree there is no such gold standard. ‘One difficulty in assaying the specificity and sensitivity of human retroviruses [including HIV] is the absence of a final “gold standard”’. According to one antibody test manufacturer ‘At present there is no recognized standard for establishing the presence or absence of HIV-1 antibody in human blood’.

Given also that (a) antibodies directed against the infectious agents which cause the fungal and mycobacterial diseases highly prevalent in Africa cross-react with the HIV antigens, (b) 60% of infants born to HIV positive mothers serorevert after maternal antibodies have disappeared from the infant circulation; the only explanations being either children cure themselves of HIV or the tests are non-specific; (c) the criteria which define a positive Western blood vary widely between institutions and laboratories and are least stringent in Africa (see Appendix); it is credible that the disparate number of positive antibody tests in sub-Saharan Africa are due to cross-reacting antibodies.

Although to some it may seem ‘curious indeed’ a non-retroviral explanation for the correlation between ‘seropositivity’ and morbidity, mortality and AIDS in Africa is eminently possible. Clinical practitioners are no strangers to tests of significant utility and predictive ability which are nonetheless devoid of specificity. Arguably the test which provides the best example is the erythrocyte sedimentation rate (ESR) because it, like the HIV antibody tests, is associated with elevations of antibodies and acute phase reactant proteins. Indeed, there is evidence that an elevated ESR is a superior predictive marker for the development of clinical AIDS than is a decrease in the CD4 cell count, although the latter is said to be the cause of the syndrome. A positive antibody test, like the ESR, may indicate a propensity to the development of particular diseases without necessarily being linked to HIV infection.

Eleni Papadopulos-Eleopulos
Valendar F Turner
John M Papadimitriou
Helman Alfonso
Barry A P Page
David Causer
Sam Mhlongo
Christian Fiala
Anthony Brink

1 Department of Medical Physics, 2 Department of Emergency Medicine, Royal Perth Hospital, Perth 3 Department of Pathology, University of Western Australia, Perth, Western Australia 4 Department of Research, Universidad Metropolitana Barranquilla, Colombia 5 Family Medicine & Primary Health Care, Medical University of South Africa, Johannesburg, South Africa 6 Mollardgasse 12a-A-1060 Vienna, Austria 7 Advocate of the High Court of South Africa Correspondence to: Dr V F Turner

References

#resp3
Appendix

Criteria defining a positive HIV Western blot

References


3. Lundberg GD. Serological diagnosis of human immunodeficiency virus infection by Western blot testing. *JAMA* 1988;260:674–9. (Data presented in this paper reveal that when the CDC criteria are used to interpret the HIV Western blot less than 50% of US AIDS patients are HIV positive whereas about 10% of persons not at risk of AIDS are also positive.)
