

MEDITEL

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COPY

Dr Graham Hughes
Consultant Rheumatologist
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May 21st, 1996

Dear Dr Hughes,

I am glad I was able to speak to you the other day concerning the development phase for our forthcoming documentary about the HIV test.

I spoke, as you suggested, to Dr Khamashta, and he said he would be happy to co-operate with us if you were in agreement with our proposals.

We are a small independent production company specialising in science and medicine. I enclose information about our work. We have made several documentaries about issues surrounding the virus/AIDS hypothesis and are now embarking on a further one for Channel 4's *Dispatches* series.

We are working with the Robens Institute, University of Surrey, on a series of preliminary tests to find out more about the specificity, sensitivity and reproducibility of the HIV ELISA test. As you know, there has been some work on the fact that patients with SLE can produce false positive results when tested. (See enclosed article that describes how 43% of lupus patients tested HIV positive after an ELISA test). We would like to include a section about lupus in our film and hopefully interview you or Dr Khamashta on the effect lupus has on the immune system. We would also like to interview one or two patients with lupus.

I enclose three relevant papers together with a brief description of our proposed tests. You will see that we feel it is important to include blood specimens from some lupus patients. We would like to submit five such specimens, together with others (see attached) to the three reference laboratories selected by Dr Andrew Taylor of the Robens Institute. Absolute anonymity will be maintained and all specimens will be identified by test codes.

We are working together with Huw Christie of the AIDS support group CONTINUUM. He is finding our HIV positive and negative participants through his organisation.

I am sending a copy of this letter to Dr Khamashta together with a separate set of papers to save time.

We hope to submit our blood specimens to the different labs in about two week's time. I shall telephone you in a few days' time to obtain your views on the matter.

Yours sincerely,

Joan Shenton

cc Dr M. Khamashta

To Dr. Graham Hughes
Sent
21.5.96

INVESTIGATION OF HIV TEST PROCEDURES

Background

It is recognised that few diagnostic tests have specificity and sensitivity of 100%. The incidence of positive and negative results are dependent on individual variations in the concentration of the agent being measured relative to the extent of any pathological changes, and on the analytical performance of the test method. The use of screening tests to detect the presence of HIV antibodies has to be considered with these limitations in mind (1).

In view of the emotive issues which surround the diagnosis of AIDS, and the implications of the detection of a positive test to HIV antibodies, consideration of sensitivity and specificity is of particular importance. The appearance of biological false positives in individuals where there is a non-HIV associated disorder affecting the immune system, has been proposed (2,3). It is intended to compare a range of HIV test procedures as used within conventional clinical and laboratory settings to determine if they really are specific to the HIV antigen.

Methodology

Subjects

Twenty subjects will provide specimens for testing. These will comprise:

- Ten HIV negative, healthy individuals
- Five HIV positive (proof of sero-positive status will be provided) individuals.
- Five subjects with SLE

Measurements

Specimens will be sent to three laboratories so that three different ELISA HIV diagnostic test kits are evaluated. The laboratories will be asked to follow all their usual procedures for testing, interpretation, carrying out of further tests, and reporting. The same specimens will be resubmitted on a second occasion to check for reproducibility.

Interpretation

The results will be shown to immunologists, virologists and rheumatologists in Britain, Australia and Germany for a discussion of the test procedures and possible implication on issues of specificity, sensitivity and reproducibility.

References

1. Mortimer P (PHLS AIDS Diagnosis Working Group). Towards error-free HIV diagnosis: notes on laboratory practice. PHLS Microbiology Digest 9 (2): 61-64
2. Papadopoulos-Eleopoulos E, Turner VF, Papadimitriou JM. Is a positive Western blot proof of HIV infection? Bio/Technology 1993; 11: 696-707
3. Bermas BL, Petri M, Berzofsky JA, Waisman A, Shearer GM, Mozes E; Binding of Glycoprotein 120 Peptides from the HIV-1 Envelope by Autoantibodies in Mice with Experimentally Induced Systemic Lupus Erythematosus and in Patients with the Disease; AIDS Research and Human Retroviruses, Vol 10, Number 9, 1994; Mary Ann Liebert, Inc., Publishers.