

RECOMMENDATIONS FOR THE FUTURE SURVEILLANCE OF INFECTION
TRANSMITTED BY FACTOR VIII AND IX CONCENTRATES

INTRODUCTION

The Hepatitis Working Party and latterly the Haemophilia AIDS Group of the U.K. Haemophilia Centre Directors has collected information regarding the incidence and types of hepatitis and HIV type 1 infection for the past 10 years. The number of hepatitis reports related to treatment with factor VIII and IX in the U.K. is given in tables 1 and 2 (see appendix) for 1980-86. The advent of pasteurised factor VIII and IX concentrates has markedly reduced, but not entirely eliminated, the risk of transfusion acquired infection. I think the time has come to review the methods of surveillance used and plan for a more comprehensive surveillance of all possible side reactions associated with the use of blood products in patients with defects in blood coagulation.

PURPOSE OF SURVEILLANCE

- 1) To provide an independent assessment of the occurrence of infection possibly related to defects in blood products and reactions associated with their use.
- 2) To provide information which may enable improvements to be made in the manufacture of factor VIII and IX to eliminate the transmission of infection and other reactions.

The reduced number of transfusion related incidents since 1985 (see appendix) gives the opportunity to investigate each episode more comprehensively.

This should include:

- a) clinical investigation of the individual affected
- b) serological investigation of individual affected

for evidence of hepatitis, e.g. serum aminotransferase tests, or virus infection; hepatitis B surface antigen; anti-HBc or anti-HBs; hepatitis A IgM antibody; serological evidence of CMV and EBV infection for the diagnosis of non-A, non-B hepatitis by exclusion. Screening and confirmation of anti-HIV tests where HIV type 1 infection is suspected;

- c) a careful history to establish the probable batch involved
- d) the clinical and serological surveillance of others who have received material from the suspect batch.

Controls

It may be necessary to choose individuals with similar transfusion histories in the same Haemophilia Centre for inclusion as matched controls from those who have not received a suspect batch of material.

Alternatively, controls could be chosen by studying individuals who had received a different batch of the same product thought not to be related to the incident under study.

PLAN OF ACTION

- 1) A Blood Product Surveillance Working Party (or similar body) could be established with representation of the Haemophilia Centre Directors, Blood Products Laboratory, the DHSS and the PHLS. The surveillance would be organised from Oxford Haemophilia Centre as before, but on a more formal basis.
- 2) Incidents would be defined as events where the reporting physician suspected, on clinical or laboratory evidence, that transmission of virus infection related to blood products had occurred, or that another reaction had occurred related to the use of blood products (see 4, page 2). Tests of blood specimens for hepatitis markers would be carried out in addition to that already done (see 2b, page 1). Follow-up of patients would be instituted where appropriate in collaboration with a patient's physician.
- 3) The system would be voluntary; physicians would be encouraged to co-operate actively in the investigation of every incident. If appropriate, the assistance of epidemiologists from the PHLS might be considered. The investigation would be on a more formal basis than before so that uniform methods could be used, but the information would be kept confidential. The manufacturers of commercial factor VIII and IX would be encouraged to collaborate.
- 4) Surveillance would cover HIV type 1, hepatitis B, non-A, non-B and other viruses possibly involved, e.g., serum parvovirus, and possible allergic reactions, e.g., hypotension or urticarial episodes have been an occasionally reported finding following infusion of cryoprecipitate.
- 5) The results would be reported to the DHSS annually (? to the Medicines Division) and to Dr. Lane at Elstree as well as to the Haemophilia Centre Directors. Consideration should be given to supplying the manufacturers with relevant information related to their products.
- 6) A small surveillance unit would be required at Oxford with data processing facilities. Medical manpower would be required to visit Haemophilia Centres for looking at case notes and other case finding.
The precise terms of reference and constitution of the group would be a matter for detailed discussion between the Haemophilia Centre Directors, DHSS, The Blood Products Laboratory, with epidemiological advice from the PHLS.

The project would be reviewed after 3 years.

I suggest a subcommittee of the Reference Centre Directors Committee be established to consider this question.

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