

F

Report of British Society for Haematology 'AIDS' Working Party

Membership: The President Dr. S.M. Lewis, the Secretary Dr. J.F. Davidson, the Treasurer Elect Dr. I. Fraser, Dr. C.R. Rizza, Professor A.L. Bloom, Dr. D. Jeffries (Consultant Virologist) and Dr. A. Pinching (Consultant Immunologist) with Miss. E. Lloyd PMLSO as observer.

Terms of Reference: To investigate the problem of the acquired immune deficiency syndrome (AIDS) in relation to the practice of Haematology in the Diagnostic Laboratory, and report to the Committee of the British Society for Haematology.

The Working Party met at the Royal Postgraduate Medical School on 27th September 1983 and prepared the following report.

Introduction

The aetiology of AIDS has yet to be established but current knowledge points to it being caused by a transmissible agent possibly a virus but a non-infective cause is possible. Transmission of this agent appears to require intimate, direct contact involving mucosal surfaces, such as sexual contact between homosexual males or parenteral spread such as occurs among intravenous drug abusers. Airborne spread and interpersonal spread through casual contact do not seem likely. The pattern of transmission of the disease and its mode of spread appears to resemble those of hepatitis B virus. The incubation period of AIDS however seems to be considerably longer than for hepatitis B and its mortality is much higher.

To date 24 cases of AIDS have been reported in the UK. (The current UK incidence contrasts sharply with that in the United States where at September 1983, 2,157 cases had been reported with a death rate of 39%). So far there has been no evidence of AIDS transmission to health care personnel from contact with affected patients or clinical specimens.

It appears therefore that at the present time the prevalence of AIDS in the UK is low and in consequence the problem in the Haematology diagnostic laboratory is small.

Because of concern about a possible transmissible agent interim recommendations are required to guide Haematologists and their Haematology laboratory staff. The Working Party sees a strong parallel with hepatitis B infection, and along with other bodies, both in the UK and in the USA, has drawn up these guidelines based in large part on that analogy.

#### RECOMMENDATION 1 - AIDS BIOHAZARD

##### Actual AIDS Biohazard

An actual AIDS Biohazard should be considered to exist in contact with and in clinical material from :-

- (a) Patients with the clinical diagnosis of AIDS
- (b) Patients where the clinical diagnosis of AIDS is probable.

##### Possible AIDS Biohazard

A possible AIDS Biohazard should be considered to exist in contact with and in clinical material from patients in high risk categories for AIDS such as homosexual males, haemophiliacs or IV drug abusers in whom at least one unexplained clinical feature that has been associated with AIDS such as persistent lymphadenopathy exists.

#### RECOMMENDATION 2 - AIDS BIOHAZARD AND LABORATORY PRACTICE

##### No AIDS Biohazard

Material from individuals who are in the at risk groups for AIDS but show no evidence of the disease is considered to be adequately covered by the current standards of good laboratory practice.

##### Actual/Possible AIDS Biohazard

Where an actual or possible AIDS Biohazard exists full Hepatitis B precautions should be followed from the procurement of the specimen through to the disposal of the specimen and the cleaning of equipment. These precautions should include the following :-

- (a) Specimens should be obtained by medical staff who should wear gloves and other protection.
- (b) Clinicians should be required to apply Biohazard notices to specimens and request forms and forward them to the laboratory in sealed double plastic bags which keep the request form separate from the specimen.

- (c) Laboratory tests should be kept to the minimum required for the management of the patient.
- (d) Mouth pipetting should be forbidden.
- (e) Protective clothing should be worn while working with the material and be discarded appropriately before leaving the laboratory.
- (f) Disposable syringes, needles and marrow puncture needles should be used and discarded directly into puncture resistant containers used solely for such disposal.
- (g) All procedures should be performed carefully to minimise the creation of droplets or aerosols.
- (h) Biological safety cabinets (Class I or II) and other primary containment devices are advised whenever procedures are conducted that have a high potential of creating aerosols or droplets. Fluorescence activated cell sorters should have plastic shielding between the droplet collecting area and the operator.
- (i) Laboratory work surfaces should be decontaminated with a disinfectant such as sodium hypo-chlorite solution (see Disinfection Recommendation) following any spillage and at the completion of the work.
- (j) Specimens should be disposed of according to Hepatitis B procedures.
- (k) It is desirable that specimens should not be stored but where this is required special precaution should be taken, to identify such specimens, by marking them clearly and storing them in separate containers from other samples.

### RECOMMENDATION 3 - AIDS BIOHAZARD DISINFECTION AND DISPOSAL

Sodium hypochlorite (household bleach) should be used as a disinfectant whenever possible. The following concentrations are recommended -:

- 1% solution (10,000ppm available chlorine) - spillage of blood, urine and faeces.

- 1% solution (10,000ppm available chlorine) - discard jars

- 0.1% solution (1,000ppm available chlorine) - terminal disinfection

Where sodium hypochlorite is inappropriate, for instance on metal surfaces and endoscopes, a 2% solution of gluteraldehyde should be used as an alternative.

CONCLUSION

The Working Party considers the Biohazard from AIDS in Haematology Laboratories in the UK to be small at present. It has broadly classified the Biohazard under two categories and recommends Hepatitis B type precautions.

These recommendations may have to be revised in the light of future developments.

December 1983

J.F. Davidson  
Hon. Secretary  
British Society for Haematology.