AGENDA ITEM 14(a) 0005

UK HAEMOPHILIA HEPATITIS WORKING PARTY

REPORT FOR 1986/87

Since the introduction of heat treated Factor VIII in 1985, and subsequently heat treated Factor IX, it has become evident that the incidence of symptomatic hepatitis related to blood products is falling. The use of more stringent regimes for pasteurisation of concentrates has also reduced the number of new HIV infections identified in 1985/86 to 29 in users of Factor VIII. All but one were related to the use of unheated Factor VIII early in 1985. The position for Factor IX is probably similar, but no accurate figures are available owing to the small number of patients treated.

The accompanying table shows the number of hepatitis cases reported to Oxford since 1985. This shows several interesting features:-

1. Excluding the eight cases on non-A non-B hepatitis related to Armour heat treated Factor VIII in 1985, the number of reported cases of non-A non-B hepatitis and hepatitis B is approximately equal.

2. 25% of infections are associated with the use of cryoprecipitate.

3. Hepatitis B has occurred associated with the use of cryoprecipitate and commercial heat treated concentrate.

Conclusions

1. Pasteurisation of Factor VIII and Factor IX using current techniques is unlikely to be complete effective in preventing transmission of infection. For instance, a case of glandular fever-like illness associated with serum parvovirus infection transmitted by heat treated NHS Factor VIII has recently been reported. This virus is probably more resistant to heat inactivation therefore than hepatitis B virus.

2. Complete blood product safety can only be achieved by:-

   (a) Donor screening using markers specific for the virus infection under investigation.

   (b) Self-exclusion of donors known to be at risk for contracting the infection at the transfusion centre.

   (c) The use of an effective pasteurisation technique for the infection under investigation.

Failure of (a), (b) or (c) can still lead to the transmission of infection. The cases of HIV infection related to Armour Factor VIII in 1986 were due to the use of plasma for fractionation which was collected in 1983 and was therefore not screened for HIV antibody.

Hepatitis B Infection

An additional measure for prophylaxis against specific infections is the use of an effective vaccine which can be given to patients prior to their receiving blood concentrates likely to transmit such an infection as hepatitis B.

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Hepatitis B vaccine is safe and effective in 90% of those immunised. The advent of HIV infection has increased the likely morbidity associated with hepatitis B in HIV infected patients and hepatitis B is thought to be a co-factor in the progression of symptomless HIV infected patients to AIDS. Due to the declining incidence of non-A non-B hepatitis, it is possible that more serious complications of hepatitis B may become commoner as the number of hepatitis B carriers in the haemophilia population may rise. Non-A non-B hepatitis is known to promote the resolution of acute hepatitis B infection when the two infections are present in the same patient and this may account for the low level of carriers (approximately 1%) seen in this population between the years 1975 and 1982. Serious complications of hepatitis B may therefore become commoner in haemophilia A and B patients unless hepatitis B immunisation is actively promoted.

Future Proposals

At a recent meeting of the Haemophilia Hepatitis Working Party, the following proposals were agreed:-

1. The use of hepatitis B vaccine should be actively encouraged and the date of immunisation should be recorded as part of the patient information held in the data bank at Oxford.

2. Surveillance of hepatitis related blood products should be enlarged to include all infections, including HIV, so that information regarding the relative risk of infection related to different products can be collected.

3. The incidence of hepatitis B carriage in haemophilia A and B patients should be studied by including details of the patients who are identified as carriers in the annual returns to Oxford. A case definition for a hepatitis B carrier is enclosed with this report.

4. Preliminary studies suggest that chronic non-A non-B hepatitis can be improved by treating patients with Alfa Interferon. Trials of this product are about to start at Sheffield and the Royal Free Hospital, London. It is hoped that this will confirm the initial results.

5. It is important to collect accurate data regarding the cause of death for patients in addition to AIDS, particularly non-A non-B hepatitis. There is preliminary evidence which suggests the number of deaths related to hepatitis may be increasing. Please send information to Oxford on all such cases, particularly where hepatitis is considered to be a secondary or tertiary factor in a patient's death.

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HEPATITIS IN UK HAEMOPHILIA CENTRES 1985/87

PROVISIONAL FIGURES

PRODUCT	1985		1986		1987 (To July)		
FACTOR VIII	NON-B	HEPATITIS B	NON-B	HEPATITIS B	NON-B	HEPATITIS B	TOTAL
CRYOPPT	0	1	1	1 (WW)	1	1	5
NHS FACTOR VIII	0	0	0	0	0	0	0
ARMOUR VIII	8*	1•	Product withdrawn 1986				9
TRAVENOL	0	0	1				1
PROFILATE	0	0	1				1
KOATE	0	0	0	1	0	2	3
Total:	8	2	3	2	1	3	19
FACTOR IX							
NHS	1	0					1
KONYNE	0	2					2
	1	2					3

• 1 Patient contracted non-A non-B, followed by hepatitis B.