JOINT MEETING OF REPRESENTATIVES OF HAEMOPHILIA CENTRES/ BLOOD TRANSFUSION SERVICE DIRECTORS: 23 APRIL 1981.

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Present:

Dr G Tovey (Chairman)	
Prof A Bloom)	
Dr C Rizza)	
Dr P Kernoff)	Haemophilia Centre Directors
Dr P Jones)	
Dr I Delamore)	
Dr G Bird)	Transfusion Service Directors
Dr H Gunson)	
Dr R Lane	(Blood Products Laboratory)
Dr J Cash	(SNBTS)
Dr G Macdonald	(Scottish Haemophilia Centres)
Dr D Walford	DHSS

SUMMARY OF THE MAIN POINTS DISCUSSED

The meeting was opened by the Chairman who explained that as part of their aim towards national self-sufficiency in blood products, Ministers had instructed officials to begin planning for a new blood products laboratory. This meant that it was vital to obtain the best possible estimates for blood products usage over the next decade. The meeting had been convened in order to consider the foreseeable requirements for blood products containing coagulation factors used in the treatment of haemophilia.

I QUANTITIES OF MATERIALS REQUIRED

I(i) Factor VIII. Members considered the statistics available from Haemophilia Centres, up to the end of 1979, which gave figures for the usage of coagulation factor preparations. In 1979, the UK usage of Factor VIII was an average of 23,000 i.u. per patient treated per year which was roughly one half of the average usage in the USA and one tenth of the usage in Germany. It was obviously important, in making such international comparisons, to bear in mind that the amount of Factor VIII which was used in different countries could well be in excess of the amount which was actually required. Nevertheless, the amount of Factor VIII used in the UK since 1969 had been rising linearly (fig 1) and in 1979 totalled 52 million i.u. per annum. Extrapolating from these figures, members felt that by the mid-1980s, some 80-100 million i.u. of Factor VIII would be required. An upper limit of 150 million i.u. for the end of the decade could be guessed at but the likely introduction of various technical innovations made it impossible to look further ahead to the requirement for the 1990s.

IT WAS AGREED THAT THE PROJECTED FIGURE FOR FACTOR VIII USAGE FOR THE MID 1980s WAS 100 MILLION I.U.

I(ii) Factor IX. The rate of increase in the usage of Factor IX concentrates appeared to be levelling off (fig 2) which was probably because many patients with haemophilia B were now on prophylactic therapy in which Factor IX had the advantage over Factor VIII concentrates in having a longer in-vivo half-life. No significant increase in Factor IX usage over the present 7.5 million i.u. was envisaged for the mid 1980s.

I(iii) Activated/non-activated Factor IX concentrates for the treatment of haemophiliacs with Factor VIII inhibitors. Recent studies showed that there was still a place for this type of material in the treatment of haemophiliacs with Factor VIII inhibitors. It would be necessary for suitable material to be manufactured in a comprehensive self-sufficiency programme for blood products, but the quantities required would be relatively small.

II TYPES OF MATERIAL REQUIRED

II(i) Frozen cryoprecipitate. Even if this were largely phased out for the treatment of severe haemophiliacs, there would still be a small requirement for its use in patients with Von Willebrand's disease and in mild haemophiliacs and some carriers with low levels of Factor VIII. In the last two categories, the small pool size with its lesser risk of hepatitis transmission was the main reason why frozen cryoprecipitate was preferred to concentrates.

II(ii) Freeze-dried cryoprecipitate. The advantages of a freeze-dried cryoprecipitate over the frozen material would be the easier storage and the greater standardisation which could be expected with the freeze-dried material. However, unless the pool size for the freeze-dried cryoprecipitate were small, the advantages of such a product in terms of lessening the hepatitis exposure of mildly affected haemophiliacs would be lost but such small pool material would be difficult to standardise and expensive to produce. In relation to these two conflictin factors, the different philosophies (and the Factor VIII yields) underlyin the Belgian and Swiss programmes for the production of freeze-dried cryoprecipitate were discussed. Neither seemed appropriate for adoption by the UK fractionators. A satisfactory solution might be achieved by the use of larger plasma pools made from donations from a restricted number of plasmapheresis donors who would effectively comprise an "accredited" panel of donors with a low hepatitis risk. It was agreed that provided steps were taken to minimise the hepatitis risk from freeze-dried cryoprecipitate, a supply of this material would be useful for mildly affected haemophiliacs and could also satisfy the small demand for fibrinogen in special therapeutic situations. The demand would not be expected to exceed 10 per cent of the total Factor VIII usage (although it was felt that this figure required further consideration). Because of volume and solubility problems, members felt that freeze-dried cryoprecipitate would be generally unsuitable for use in home therapy for severely affected haemophiliacs.

IT WAS AGREED THAT PROBABLY NO MORE THAN 10 PER CENT OF THE FACTOR VIII-CONTAINING PRODUCTS SHOULD BE IN THE FORM OF FREEZE-DRIED CRYOPRECIPITATE. A SMALL AMOUNT OF FROZEN CRYOPRECIPITATE SHOULD STILL BE MADE FOR USE IN SELECTED CASES.

II(iii) Intermediate purity concentrate.

IT WAS ESTIMATED THAT A MINIMUM OF 80 PER CENT OF THE FACTOR VIII REQUIREMENT WOULD NEED TO BE IN THE FORM OF INTERMEDIATE PURITY CONCENTRATE.

II(iv) High purity concentrate. This was principally needed for major surgery in order to reduce the fibrinogen load to the patient from less pure products and, more rarely, to prevent haemolytic reactions due to isoagglutinins.

IT WAS AGREED THAT A MAXIMUM OF 10 PER CENT OF THE TOTAL FACTOR VIII REQUIREMENT WOULD BE NEEDED AS HIGH PURITY CONCENTRATE.

III CURRENT PROBLEMS

III(i) Pro-rata distribution of Factor VIII. It was explained that pro-rata return of blood products was an interim measure to stimulate regional collection of plasma. The basis for calculating the special allocation to the Lord Mayor Treloar School was explained and was agreed.

III(ii) Collection of data on regional requirements for Factor VIII. In considering the working of the pro-rata system, the Advisory Committee on the NBTS had felt that it would be essential for RTDs to have ready access to information on the total usage of Factor VIII in their regions. For this reason, the Advisory Committee strongly advocated that all supplies of Factor VIII (both NHS and commercial) should be held in, and issued from, RTCs. The system had worked well in the West Midlands Region where, in consultation with Regional Haemophilia Centre Directors, the RTD negotiates the purchase of all the commercial Factor VIII used in the Region and holds the stocks. The money for the purchase comes from the users' budget and not from the RTC budget. A similar system in the North Western Region had encountered problems which, it was felt, were due to these purchases coming out of the RTC budget. It was felt that with a separate budget, as in the West Midlands, these problems would be resolved. Haemophilia Centre Directors were opposed to the introduction of such a system in that they valued the flexibility of product supply which was inherent in their existing arrangements and they felt that the machinery for collecting statistics on Factor VIII usage was adequate without introducing this extra measure of oversight of product usage. Whilst agreeing the excellence of the Haemophilia Centre statistics, Transfusion members felt that the need was for a monthly tally of Factor VIII purchase and usage rather than for yearly returns in arrears.

IT WAS AGREED THAT THE PROPOSAL FOR ALL SUPPLIES OF FACTOR VIII TO BE HELD IN, AND DISTRIBUTED FROM, RTCs NEEDED FURTHER CONSIDERATION BEFORE A DECISION COULD BE TAKEN ON ITS ADOPTION.

Future meetings. As this was an ad hoc meeting, convened at the request of the Advisory Committee on the NBTS, no further meeting had been planned. However, members considered that there was a need for a further meeting of those present and then, perhaps, for a continuing forum in which "producers" and "users" could continue this useful dialogue.

IT WAS AGREED THAT A FURTHER MEETING SHOULD TAKE PLACE ON 8 OCTOBER AT THE ROYAL FREE HOSPITAL IMMEDIATELY PRECEDING THE ANNUAL MEETING OF THE HAEMOPHILIA CENTRE DIRECTORS.

DW
April 1981

prepared by Dr Walford ?

NOTES FOR JOINT MEETING OF REPRESENTATIVES OF HAEMOPHILIA CENTRES/BLOOD TRANSFUSION SERVICE DIRECTORS: APRIL 1981

1. BACKGROUND

Ministerial agreement has been obtained for the (planning/building) of a new plasma fractionation plant within the National Blood Transfusion Service. Although this plant is unlikely to operate until the late 1980s, consideration must be given now to the probable requirements for Factor VIII and other coagulation factor concentrates to meet genuine clinical needs in the United Kingdom by that time and during the 1990s.

2. FACTS TO BE BORNE IN MIND WHEN CONSIDERING REQUIREMENTS FOR FACTOR VIII

2.1 By the late 1980s separation of fresh frozen plasma (FFP) from 40-45% of all donations of whole blood to NBTS is likely to provide ca 35-40 M iu Factor VIII in the form of currently produced Intermediate Concentrates (240 iu).

2.2 To avoid the undesirable wastage of human red cells all additional FFP required must be obtained from plasmapheresis donors (pph.d).

2.3 If each pph.d. gives 10 donations per year, every 5000 pph.ds on national panel will result in ca 11 M iu Factor VIII (as Intermediate Concentrates).

2.4 It is a reasonable assumption that if sufficient FFP becomes available to meet genuine clinical needs for Factor VIII there will be enough available for the preparation of Factor IX Complex (and other blood products such as albumin and normal immunoglobulin).

3. MATTERS FOR DISCUSSION

3.1 Requirements for Factor VIII: total iu per annum.

3.2 Some countries (Switzerland, Belgium, Finland, Netherlands and France) have opted to make freeze-dried cryoprecipitate the major product for haemophilics. Dr Gunson is visiting Transfusion Centres in Switzerland and

Belgium in April and will report to the meeting on 23 April.

3.3 What are current views on the proportional annual requirements for:

3.3.1 A high purity concentrate.

3.3.2 Intermediate concentrate

3.3.3 Freeze-dried cryoprecipitate.

4. CURRENT PROBLEMS

4.1 Pro-rata distribution. — Is this a problem? Discuss with Dr Walford before the meeting.

4.2 Collection of data on Regional requirements for Factor VIII concentrates.