

ANTI HAEMOPHILIC GLOBULIN (FACTOR VIII)

1. AVAILABILITY IN THE UNITED KINGDOM

There are 2 main sources of Factor VIII in this country, one is through the D.H.S.S. Central Processing Laboratory at Elstree and the other is from commercial companies.

Central Processing Laboratory

The Factor VIII received from this source is 'free' in the sense that no payment is made by a district health authority requesting supplies. However, the amount of Factor VIII given to each district is directly proportional to the amount of plasma sent by the Regional Blood Transfusion Service. This is then used at the Haemophilic Centres and the shortfall in the amount of Factor VIII required is then purchased from a commercial source.

Commercial Sources

There are 4 U.K. based companies at present marketing Factor VIII preparations. As a result of commercial competition, the price per unit of Factor VIII is currently 8p. There is some degree of variation in purity of these preparations and this is also taken into consideration before Professor Bloom and the Principal Pharmacist at U.H.W. decide on the purchasing sources. Another point that is considered, is whether or not the Factor VIII supplied has been imported from either Europe or America or made from plasma gathered in the U.K.

2. ANNUAL COSTS

Central Processing Laboratory

The cost incurred by the district or region in collecting plasma is difficult to assess but the Factor VIII cost can only be based on the amount of plasma supplied. Details of this should be available from Dr. Tony Napier, Director of the Regional Blood Transfusion Centre.

Commercial Sources

This cost is almost exclusively incurred by 3 centres in Wales.

University Hospital of Wales, South Glamorgan	£80,000 p.a.
Royal Gwent Hospital, Gwent	£ 2,000 p.a.
Morrison Hospital, West Glamorgan	£10,000 p.a.

These costs are based on the price per unit being 8p.

3. HAEMOPHILIC CENTRE, U.H.W.

The number of haemophilic patients treated at this centre on a regular basis is 80. Patients visit the treatment centre at regular intervals and following administration of the Factor VIII preparation, they are discharged back into the community. Further supplies of Factor VIII are given to them on discharge which will then be administered by a suitably trained relative or a district nurse. At present, there is no alternative method of supplying the Factor VIII preparation as it is a hospital only item and is not prescribed by the general practitioner.

The 80 patients attending the centre are resident in 5 districts in Wales.

<u>District</u>	<u>Percentage of Patients</u>	<u>Cost</u>
Mid Glamorgan	45%	£36,000
South Glamorgan	25%	£20,000
Gwent	15%	£12,000
West Glamorgan	10%	£ 8,000
Dyfed	5%	<u>£ 4,000</u>
	Total	<u>£80,000</u>

The current position is that South Glamorgan finances this total cost. These percentages have been rounded off and more accurate figures would have to be done on an actual patient basis if accurate costing statistics are required.

4. THE USE OF HEAT TREATED FACTOR VIII

Because of the possible contamination of Anti-Haemophilic Globulin with AIDS virus, it is now recommended that Heat Treated Factor VIII concentrate should be used for most haemophilic patients. A Lancet editorial will be appearing in the next couple of weeks regarding a suggested policy on this problem.

Central Processing Laboratory

The installation of autoclaving processes to heat-treat the manufactured Factor VIII in these laboratories, will commence in January 1985. Initially this will only be one autoclave with a capability to cope supply South Glamorgan with 30% of its requirements. It is hoped that 2 additional autoclaves will be commissioned by April 1985 when the supply situation should return to normal.

South Glamorgan will continue to send the quota of plasma to Elstree, but the stock-pile at Elstree will probably not be processed and the Factor VIII distributed until April 1985. South Glamorgan will therefore, have to purchase additional commercial quantities to make up for this short-fall from Elstree. This could only be a short-term problem last 3-4 months, but will mean an additional cost of approximately £12,000 per month.

#### Commercial Sources

At the present time, there are quite severe cost implications to South Glamorgan if Heat Treated Factor VIII is to be purchased commercially. The cost per unit will rise from 8p to 12p, which will result in an overall increase in cost per annum of £40,000.

It should be noted that this cost is based on maintaining the existing level of purchase on the basis that the Central Processing Laboratory will be able to supply their Factor VIII as a heat treated product.

There are a number of options open to South Glamorgan D.H.A.

#### 5. OPTIONS

- (i) A decision taken not to use the Heat Treated Factor VIII.
- (ii) A decision taken to use the Heat Treated Factor VIII and to recover the additional costs from other districts in Wales whose patients receive the treatment.
- (iii) The same as option 2, but attempt to recover all Factor VIII costs from other districts.
- (iv) To apply to the Welsh Office for funding.
- (v) To disperse more of the patients seen at U.H.W. on a more permanent basis to districts for treatment.
- (vi) To look at the feasibility of producing more plasma in the region to send to the Central Processing Laboratory for Factor VIII manufacture.
- (vii) To reach an agreement with physicians not to take on any additional haemophilic patients at U.H.W.

NOTES

- (a) When the Factor VIII preparations are heat treated there is a 15% loss in yield. This is one reason for the increased costs of the commercial preparation. It will also mean that any district or region will receive 15% less units from Elstree, if the same amount of plasma is forwarded to them.
- (b) The Unit Executive at U.H.W. had agreed to underwrite the additional £40,000 per annum expenditure. No decision has yet been made on the short-term costs (circa. £36,000) as a result of the envisaged short-fall from Elstree for the next 3 months.
- (c) Dr. Rhodes, as Chairman of the Co-ordinating Group for Hospital Drug Economies, has written to Professor Bloom suggesting that in view of the cost implications resulting from the use of Heat Treated Factor VIII, this matter should be discussed with the Division of Medicine.
- (d) It needs to be decided whether the Haemophilic Centre at U.H.W. is a Regional service.
- (e) There should be a further increase in plasma production when new laboratories are built by 1986.

Dr. B.K. Evans,  
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BKE/MAS