Reference _____

Population 1979	Northern Ireland	1.54 million
	Wales	2.78 "
	Scotland	5.17 "
	England	46.40 "

Mr P Simpson

BLOOD PRODUCTS

I felt it might be helpful if I put on paper some facts regarding blood products prior to our meeting with Dr McClelland and the Eastern Board on Monday 6th April.

Recent Developments

Because of difficulties that occurred with the supply of blood products DHSS (L) decided (1) that from 1st April 1981 a system of pro rata distribution of certain blood products would come into operation and (2) that immediate upgrading of the facilities at Elstree (BPL) would be carried out at a cost of £1.25 million which would double the production of Factor VIII and increase the supply of albumin by 60%. This posed an immediate problem for Northern Ireland as we because of technical difficulties had not been sending any fresh frozen plasma to Elstree but had been receiving back a small supply of Factor VIII. It was suggested that we explore the possibility of linking up with Liberton which it was stated had considerable spare capacity. DHSS (L) recommended that the aim in the UK should be to produce 600 international units of Factor VIII per 1,000 population within the next two years.

Factor VIII

In Northern Ireland in 1980 we obtained 140,000 international units of Factor VIII from Elstree (BPL), made 300,000 international units of cryoprecipitate at Durham Street and purchased 1,000,000 international units (approximately) commercially.

It is difficult to estimate future demand for Factor VIII because the population of haemophiliacs is living longer and so it is likely that the requirement for this substance will increase over the years. The present annual consumption of Factor VIII in England and Wales is 55 million international units and between a third and a half of this is purchased commercially.

Dr McClelland has been liaising with Dr Cash regarding the projected link up with Liberton to see if it is feasible on the professional side and he has discussed the quantity of blood products that we might send and the possible transport arrangements. It is suggested that in the first year we could send -

4,000 litres of fresh frozen plasma which is equivalent to 800,000 international units of Factor VIII
1,000 litres of cryoprecipitate supernatant
2,000 litres of time expired plasma

In the second year the amount of fresh frozen plasma might be increased to 5,000 litres which would be equivalent to 1,000,000 international units of Factor VIII. It is understood that the Scottish BTS van could come over to Northern Ireland every 4 weeks to collect our fresh frozen and time expired plasma. It could at the same time deliver processed blood products.

If Durham Street can meet its targets and the quality of plasma is good we should be able to almost meet our total needs for Factor VIII.

Factor IX

This is produced at Oxford - which is linked with Elstree - and we obtained 325,000 international units of Factor IX in 1980. This substance does not require fresh frozen plasma and no likely shortage has been indicated. It is assumed that Liberton will be able to meet our requirements for Factor IX without difficulty.

Albumin

This is manufactured from time expired plasma and the supernatants of cryoprecipitate. In 1980 Northern Ireland obtained 36 kgms of albumin from Elstree but on a pro rata basis we would be entitled to 98 kgms. When the arrangement with Liberton will commence we would get our albumin from Scotland but until this is operational we should continue to send time expired plasma to Elstree and get back the appropriate blood products. We would need to confirm that in fact we can utilize the additional albumin we are entitled to.

Note: Elstree have indicated that they have a difficulty in processing time expired plasma which means that this plasma has to be stored which also creates a problem.

Albumin is supplied in two forms - plasma protein fraction 400 ml bottles, of which 2,000 approximately are used each year and albumin salt poor 20 g solution bottles usage approximately 200 a year. The demand for the salt poor albumin is likely to increase and our requirements for this would need to be identified.

Anti-D

The Northern Ireland usage of this specific immunoglobulin in 1980 was -

100 ug	(micrograms)	3,122 vials issued
50 ug	"	91 vials issued
500 ug	"	47 vials issued

While no shortage of this immunoglobulin was identified at Elstree Dr Cash at Liberton informed Dr McClelland that the position in Scotland was different and in fact Scotland might not be able to assist. To obtain this substance it is now necessary to immunise Rh -ve male volunteers and Dr McClelland believes that it might be prudent to explore the possibility of producing anti-D locally. This would entail the employment of a full time medical assistant and perhaps two additional donor attendants.

Anti-Tetanus

Fifty litres of anti-tetanus serum was sent to Elstree last year for processing.

Anti-Herpes Zoster

Six litres of high titre plasma were sent to Elstree for processing last year.

Anti-Hepatitis B

Two litres of high titre plasma were sent to Elstree for processing last year.

Action to be taken

1. Confirm date when Durham Street Hepatitis Laboratory will be operational.

2. The Board to advise the Department of the proposed arrangements and decide who negotiates financial details with Scottish CSA.

3. Enquire if in future all NHS blood products should be issued through Durham Street.

4. Confirm arrangements for salt poor albumin.

5. Confirm arrangements for anti-D specific immunoglobulin.

GRO-C

G T N LAWSON
Senior Medical Officer

3 April 1981