

Thursday, 3 February 2022

(10.00 am)

(Proceedings delayed)

(10.03 am)

SIR BRIAN LANGSTAFF: Good morning, Dr Gabra.

THE WITNESS: Good morning.

SIR BRIAN LANGSTAFF: You can hear me, obviously. Can you see me?

THE WITNESS: Yes, and I can see you.

SIR BRIAN LANGSTAFF: Good. In a moment or two I'm going to ask Mary to ask you to take the oath. Let me tell you who you're talking to. You have a small and select group of people here in Aldwych in London. There are probably a large number, around 100 or so, who will be watching remotely online. Today we are also challenged, as we have been earlier this month, this session, by the fact that Ms Scott, who will be asking the questions, will be asking those from a remote link herself and that's caused a slight delay in starting this morning, I'm sorry about the technical hitch.

You are at home, are you?

THE WITNESS: Sorry, I didn't get --

SIR BRIAN LANGSTAFF: Are you in Birmingham -- are you at home?

1

Q. Thank you. I'm going to start, Dr Gabra, by going through with you details of your career. So is it right that in 1970 -- between 1970 and 1972, you were a senior house officer in clinical pathology and haematology at the Isle of Thanet group of hospitals and at the Haemophilia Centre there?

A. That's correct, yes.

Q. During your time there, were you involved in clinical care of people with haemophilia?

A. Yes.

Q. Did you administer cryoprecipitate during your time there?

A. Yes, yes, and produce it as well.

Q. Did you have any experience of factor concentrates?

A. I knew that they were available in a shelf stored for emergency, and they used to come from Oxford, that's all I --

Q. So was the main treatment at that time cryoprecipitate?

A. Correct, yes.

Q. Then in 1972, between 1972 and 1974, you were a registrar in a clinical pathology and haematology at the laboratory services based at Stirling and Falkirk Royal Infirmary in Scotland, is that right?

A. Correct, yes.

3

THE WITNESS: Yes, yes, I'm in Birmingham, yes.

SIR BRIAN LANGSTAFF: Are you on your own?

THE WITNESS: You mean in the room?

SIR BRIAN LANGSTAFF: Yes.

THE WITNESS: Oh, no, I am -- yes, I am. I am on my own.

SIR BRIAN LANGSTAFF: Thank you.

THE WITNESS: My wife is still at home but she's somewhere else, I think.

SIR BRIAN LANGSTAFF: Right. When we get to a break, we'll have our first break around about 11.15, a chance for you to take a break, during that and any following break, you must not talk to anyone, including your wife, about the evidence you have given or evidence which you think you may yet be asked to give, but you can talk about anything else.

THE WITNESS: Yes.

SIR BRIAN LANGSTAFF: Now, I'll ask Mary, then, to ask you to take the oath.

DR GAMAL GABRA (sworn)

Questioned by MS SCOTT

SIR BRIAN LANGSTAFF: Ms Scott? Ms Scott?

MS SCOTT: I'm here. Can you hear me?

SIR BRIAN LANGSTAFF: Yes.

MS SCOTT: Dr Gabra, can you hear me and see me?

A. Yes.

2

Q. What did you actually do in your registrar post during that period?

A. I used to see patients, I used to sort out the results of the tests that come, and I used to -- I think I used to share in the clinic that the haematologists used to have.

Q. And --

A. I can't remember the periods exactly.

Q. In terms of the treatment of patients, were you providing mainly cryoprecipitate at that stage?

A. No, I wasn't giving patients, it was just a clinic to see patients but they were not specifically haemophilia patients, haematology patients.

Q. Ah, haematology patients?

A. Anaemias and things like this.

Q. Were you seeing people with haemophilia at that stage?

A. Sorry?

Q. Were you seeing people with haemophilia at that stage?

A. I was not, I was not seeing specifically people with haemophilia. I stopped my actual clinical use of my skills in haemophilia after leaving the south of Scotland -- the south of England.

Q. Then in 1974 you took up a post as registrar, and -- then subsequently becoming senior registrar in haematology and blood transfusion at the Glasgow and

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1 West of Scotland Blood Transfusion Centre; is that
 2 right?
 3 A. Yes, that's correct.
 4 Q. You stayed at the Glasgow and West of Scotland Blood
 5 Transfusion Centre until 1989, becoming a consultant
 6 in 1980?
 7 A. Yes, that's correct.
 8 Q. While you were at the Glasgow Centre, you -- your CV
 9 tells us you had secondments to the Glasgow Teaching
 10 Hospital. Can you tell us a little bit about that?
 11 A. Yes, it was a necessary part of my preparation for
 12 the -- sorry, I run short of words, so please put up
 13 with me -- the College of Pathology. And I needed
 14 six months at least of hospital and clinical training.
 15 So I did that in the Royal Infirmary.
 16 Q. So that was presumably in the early years of your time
 17 as a registrar?
 18 A. Yes, yes.
 19 Q. Then your CV tells us that once you became
 20 a consultant, is this right, you became honorary
 21 clinical lecturer at the Faculty of Medicine at the
 22 University of Glasgow and also honorary consultant
 23 haematologist to the Greater Glasgow Health Board?
 24 A. Yes, yes.
 25 Q. Again, can you tell us a little bit about what you

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1 involved being part of the secretariat of the World
 2 Health Organisation Global Blood Safety Initiative?
 3 A. That's correct, yes.
 4 Q. We'll look at a document that you were involved in
 5 during that time a little bit later on today. Then in
 6 1992, you returned to the UK taking up a post at the
 7 Birmingham Regional Transfusion Centre in the West
 8 Midlands, first of all as consultant, and then as
 9 deputy director, and then, when the National Blood
 10 Authority took over the Regional Transfusion Centre,
 11 as lead medical consultant?
 12 A. Yes, yes. It was quite a change happening in a short
 13 time, yes.
 14 Q. And we'll come back to that in the course of your
 15 evidence. Then you retired in March 2003?
 16 A. Correct, yes.
 17 Q. I'm going to ask you some questions now about your
 18 time in Glasgow. When you arrived there in 1974 as
 19 a registrar, was the Centre Director Dr John Wallace?
 20 A. Yes, yes.
 21 Q. And he had been in place, had he, since 1946?
 22 A. Yes, I wasn't sure but I think he was the head when
 23 I started to be there, yes.
 24 Q. Certainly he'd been in place for a long time by the
 25 time you arrived?

7

1 were doing as honorary clinical lecturer at the
 2 University of Glasgow?
 3 A. I'm trying to remember if I had part in the teaching
 4 of students, but I don't think that this happened in
 5 Glasgow. It happened, actually, when I came down to
 6 Birmingham. So it was an honorary sort of position.
 7 Q. Truly honorary, in that you weren't really doing any
 8 teaching?
 9 A. No, no, I don't think I was doing it in -- I can't
 10 remember if I did that in Glasgow.
 11 Q. Can you recall what you were doing in your role as
 12 honorary consultant haematologist for the Greater
 13 Glasgow Health Board?
 14 A. Yes, I think I remember I used to join the clinic for
 15 follow-up of women with anti-D in their pregnancy, and
 16 there was a clinic and I used to attend it
 17 representing the Transfusion Service, so that we can
 18 follow it up -- follow the patients up, deliveries of
 19 antibody supply of blood products for intrauterine
 20 transfusion and that sort of thing. So it was
 21 a regular -- I think it was a weekly meeting at the
 22 hospital itself, where I used to work.
 23 Q. Then in 1989, you took up a post in Geneva as the
 24 blood programme adviser to the League of the Red Cross
 25 and the Red Crescent Societies, and that post also

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1 A. Yes, I think it was during the war -- just after the
 2 war.
 3 Q. And he was replaced not long after you arrived in 1976
 4 by Dr Ruthven Mitchell; is that right?
 5 A. That's correct, yes.
 6 Q. And he remained Centre Director for the time that you
 7 were -- for the whole time you were in Glasgow until
 8 you left in 1989?
 9 A. Yes. I am aware that he was there.
 10 Q. Now between 1974 and 1980 when you were registrar and
 11 senior registrar, can you recall what your duties were
 12 and what your responsibilities were, at the
 13 Glasgow Centre?
 14 A. Yes, I think I imagined something about it when you
 15 asked me an earlier question. John Wallace was very
 16 keen to establish contact and relationships with
 17 the hospitals in the region, in the West Midlands --
 18 not West Midlands, West Midlands is for down south --
 19 but for the West Transfusion Service area hospitals.
 20 And he was keen to -- and this is where I used to join
 21 him, and to -- in the meetings in hospitals, in order
 22 to persuade people to -- not to abuse the use of
 23 bloods and have guidelines for the clinical use of
 24 bloods, and also to facilitate their acceptance of
 25 using red cell concentrates rather than in order to

8

1 store the plasma. And that was quite an interesting
 2 point where I -- he was also involved in the clinic
 3 for women with -- again, pregnant women with anti-D
 4 problems. And I used to attend these clinics either
 5 with him or on his behalf.
 6 **Q.** Just picking up, then, on the work that you were doing
 7 with Dr Wallace trying to persuade clinicians not to
 8 use whole blood but to use concentrated red cells --
 9 **A.** It was better than me -- I'm so sorry about expressing
 10 myself. Thank you.
 11 **Q.** You've explained that you did that by meeting with
 12 them in person, so was there a programme of going
 13 round all of the hospitals to meet with the
 14 clinicians?
 15 **A.** Yes, yes. Yes, that's what he was doing.
 16 **Q.** How successful were those attempts and how were
 17 they -- how did the clinicians respond to these
 18 haematologists coming along and telling them how they
 19 should practice?
 20 **A.** Yes, I think I personally noticed that -- when we were
 21 looking at the usage that it was increasing very
 22 slowly. I think it was around 30 per cent or
 23 40 per cent when we started and then, I remember
 24 a figure of 60 per cent that has gone and sparing the
 25 use of unnecessary use of whole blood. So I have --

9

1 in Glasgow?
 2 **A.** I must -- since I'm saying the truth only, I cannot
 3 remember the details that you mention, but it is
 4 likely that this has happened, because there was
 5 a movement in many hospitals, particularly the large
 6 hospitals, the University Hospital in Glasgow, to
 7 accept this fact and the communication was closer than
 8 when the time came for John Wallace. But John Wallace
 9 used to talk simply, and in a simpler way, it wasn't
 10 anything. So probably that is -- that has come later
 11 but I cannot exactly say, you know, that this has been
 12 risen and I have seen this. I can't remember that.
 13 **Q.** Is it right to understand from your answers, your
 14 evidence, that you were keeping an eye on the use of
 15 red cell concentrates, and so on, in Scotland -- when
 16 I say "you", I mean at the Glasgow Centre -- that
 17 there was a process of auditing the use of blood and
 18 blood products in the area?
 19 **A.** Yes, in one way, yes. When I mention the figures, it
 20 was based on vision from the past about the progress
 21 in the -- in reducing the use of the whole blood and
 22 store -- and getting plasma for products.
 23 **Q.** Did you attend donor sessions in those early years
 24 before you became a consultant?
 25 **A.** Yes, yes. And I was actually involved in -- also in

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1 I realised -- I felt, myself, that this wasn't --
 2 really was successful, but up to a point, and then
 3 after that it's difficult to support, to --
 4 **Q.** So is it right to understand as well, or -- the
 5 discussion with colleagues in those early years
 6 concentrating on the use of red cell concentrates, was
 7 it also part of the discussion then or at a later
 8 point to try to encourage them to use less blood and
 9 blood products, full stop?
 10 **A.** Yes, yes.
 11 **Q.** Again, how was that received by your clinical
 12 colleagues? Were they receptive to your message?
 13 **A.** Well, in one way, yes. And then in other ways they
 14 would say just "Don't talk to me about this, just give
 15 me the red stuff". So there was a degree of
 16 reluctance in accepting that concept.
 17 **Q.** You mentioned in your answer to my first question,
 18 I think, the idea of coming up with guidelines for use
 19 of blood and blood products. We've heard from other
 20 witnesses that they introduced schedules, so for
 21 example for hip operations, they might have a schedule
 22 which would say the average amount of units of blood
 23 in a hip replacement is, whatever it is, six, and that
 24 would become the norm for ordering for a hip
 25 replacement. Was anything of that nature introduced

10

1 recruiting and maintaining donors who had antibodies,
 2 for the anti-D, for the anti-D preparation. And I am
 3 mixing things up now. I think we were sending this
 4 antibody-rich plasma for fractionation in Glasgow --
 5 not in Glasgow, in Edinburgh. And there was quite
 6 a number of these donors that were boosted by rhesus
 7 positive cells, in order to increase the level of
 8 antibody, and I seem to remember that -- but
 9 I remember vividly that this has happened because it
 10 occurs when I was in Birmingham but we used to store
 11 these red cells from specific donors in liquid
 12 nitrogen and use the same cells for each donors and
 13 have the -- and have plasmapheresis for them.

14 So that was another one of my activities in
 15 Glasgow.

16 **Q.** Then once you became a consultant in 1980, your
 17 statement tells us that you were involved in donor
 18 care and plasma collection, and shared medical
 19 responsibility for the serology testing at laboratory
 20 of patients and blood donations; is that right?
 21 **A.** Yes, that's the large main involvement.
 22 **Q.** I'm just going to ask you some questions now about the
 23 actual centre itself, and is it right to understand
 24 that the headquarters of the Glasgow and West of
 25 Scotland Centre was based in the Law Hospital in

12

1 Lanarkshire?

2 **A.** Correct, yes, and if I may add that this was initially

3 a hospital, an army hospital for patients who were

4 coming with wounds during the Second World War, so it

5 was out of Glasgow, away from the bombs.

6 **Q.** Is that where the laboratory service for the

7 Transfusion Centre was?

8 **A.** That's correct, yes.

9 **Q.** Is it also right to understand that there was

10 a freeze-drying plant at the Law Hospital?

11 **A.** Yes, and it was mainly introduced, I think, during the

12 war to supply plasma.

13 **Q.** That formed part of the transfusion centre, did it?

14 **A.** That's correct, yes, yes, yes, yes.

15 **Q.** There was also a blood donor centre in Vincent Street

16 in Glasgow --

17 **A.** Yes.

18 **Q.** -- where you would hold donor sessions?

19 **A.** Yes, but I used to go there, if they needed someone,

20 if one of the medics was not there, but it wasn't my

21 main activity.

22 **Q.** The donor records were kept there; is that right?

23 **A.** The?

24 **Q.** The donor records were kept in the Vincent Street --

25 on the Vincent Street site?

13

1 Here we've got a visit to the Glasgow and West

2 of Scotland Blood Transfusion Centre in March 1982,

3 and we can see who -- the inspectors are listed there

4 and the personnel seen, and that doesn't include you.

5 Presumably that -- well, we can see that doesn't

6 include you.

7 Then if we go down the page to paragraph 2, we

8 can see a previous inspection was carried out on

9 17 January 1980. At paragraph 3:

10 "It has to be said that the Preparation Area for

11 bottles and closures which was criticised on the

12 previous informal visit was substantially worse at the

13 time of this inspection. This seems to be due to

14 circumstances beyond the control of the Transfusion

15 Centre Staff and has been caused by the uncertain

16 future of the Freeze Dry facility."

17 Then it talks about the purchase of the new

18 autoclave having gone ahead.

19 Then if we look at paragraphs 4 and 5, we can

20 see the ambit of the visit:

21 "... restricted to the manufacturing activities

22 conducted at the Centre along with the Quality Control

23 activities. No donor services were visited and

24 activities at the Glasgow St Vincent Street donor

25 centre were also not seen ...

15

1 **A.** I think it is possible, but I can't remember exactly

2 whether it was kept in the headquarters in the

3 hospital in Lanarkshire or in the Centre. I can't

4 remember exactly.

5 **Q.** Now, we've heard from other witnesses from Scottish

6 centres that they carried out blood banking for the

7 hospitals in which they were based. Was that the case

8 for Glasgow? Were you the blood bank for the Law

9 Hospital?

10 **A.** No, no, they had their own blood bank actually. They

11 had their own blood bank. And I can't remember the

12 number of hospitals but it was quite an area, and we

13 used to supply blood routinely, I mean every day,

14 according to what they have requested.

15 **Q.** So the Glasgow Centre, unlike the other centres we've

16 heard about, was run more along the English lines: it

17 was a transfusion centre separate from the hospitals

18 it served?

19 **A.** Yes, yes. It was.

20 **Q.** I'm just going to take you to a document, and ask you

21 some questions about the facilities, and it's

22 SBTS0000407006.

23 **SIR BRIAN LANGSTAFF:** I think you have to say "_006".

24 **MS SCOTT:** Sorry,_006, beg your pardon. So

25 SBTS0000407_006.

14

1 "Serious attention was not given to the Serology

2 Laboratory practices and their reagent preparation

3 ..."

4 Just pausing there, that, Dr Gabra, might be

5 a reason why they didn't see you -- because this

6 wasn't your key area of responsibility in 1982; is

7 that right?

8 **A.** Yes, yes, yes. But I became aware of that and I knew

9 that this was happening, and it was restricted for

10 some reason, I don't know why. I can't remember why

11 in the discussion, but certainly it wasn't up to

12 standards.

13 **Q.** Yes. So, if we then go over the page to paragraph 9,

14 we can see there it says:

15 "The region is largely self-sufficient in terms

16 of procurement of source material. In addition, they

17 do not supply processed materials to sources outside

18 the region (other than Freeze Dried Plasma)."

19 And I'll come to ask you some questions about

20 freeze-dried plasma in due course. So in 1982 that

21 seems to be the position, largely self-sufficient in

22 terms of procurement of source material.

23 Then if we go on to paragraphs 11 and 12, we can

24 see some of the difficulties that the inspectors see,

25 particularly in paragraph 12:

16

1 "... it is understood that this is the only way
2 in which 22 tons of plasma per year can be processed
3 and in-process monitoring results appear to show no
4 contamination problem of any significance."
5 Then if we go down to paragraph 14, I'm just
6 giving a flavour of some of the difficulties that the
7 Centre seemed to be having:
8 "... area is very overcrowded and contains
9 packaging material as well as finished product ..."
10 Then we can see -- it's probably best picked up,
11 I think, at page 11, where the summary section starts
12 "Summary of Comments Made", and we can see under A,
13 "Comments on practices", and then if we don't spend
14 any time on that, it sets out some of the issues
15 there.
16 Then if we turn over to page 12, we can see B
17 there, "Facilities", paragraph 118, some of the
18 challenges that the Glasgow Centre had there. We can
19 see:
20 "Storage is totally inadequate."
21 119:
22 "They are inadequate because existing stores are
23 either overcrowded or of an unsatisfactory nature ..."
24 And it talks about "dripping pipework and dusty
25 conditions".

17

1 "2. A period of 12 months should be sufficient
2 for detailed proposals to be made by the Service (and
3 SSHD). These should rectify the deficiencies in
4 processing facilities and storage areas ...
5 "3. The absence of such proposals will result
6 in drastic reduction of processing activity at this
7 Centre including the cessation of freeze drying.
8 "4. Other deficiencies and comments may be
9 rectified on an on-going basis."
10 We can see the real difficulties there
11 identified in that inspection. Do you have any idea
12 as to why matters had got seemingly so bad by 1982?
13 A. I think it remained as a hospital of the aging -- the
14 age of the hospital or the service. The facility was
15 established during the Second World War. And it
16 remained like this for quite some time.
17 And I don't have any explanation for that. But
18 I have a feeling that this -- I could feel that things
19 were -- I mean, there were five centres in Scotland,
20 and I'm not sure -- I haven't seen like this, I mean,
21 from other centres, but I suspect that there was a lot
22 of requirements that needed to be done.
23 I was personally very sad to see that the
24 facility has not been improved when I was working, and
25 in fact I was very sad on the day when we had to stop

19

1 122:
2 "The preparation area for containers is
3 appalling. This work needs to be finished without
4 delay."
5 "123. Aseptic areas are not to an adequate
6 standard."
7 Then sets out the reasons why that is.
8 "124. Freeze drying is conducted under very
9 poor conditions."
10 And then:
11 "125. The 'high risk' hepatitis facility is not
12 to a very good standard and requires attention."
13 Then if we go over the page we can see the
14 recommendations -- sorry, 129, before we get to that:
15 "129. Facilities for storage and processing of
16 blood and blood products are either insufficient or
17 inadequate."
18 That's one of the conclusions in the second one.
19 "The most appropriate response from the Scottish
20 BTS would be an entirely new purpose built facility
21 for the processing and quality control of blood at
22 this Centre."
23 Then we can see the recommendations:
24 "... preparation area for bottle preparation
25 must be brought up to standard without delay.

18

1 using the facility for the production of products.
2 And I remember I wrote something called the "obituary"
3 of the facilities for the products production.
4 I felt sad, but I can't explain. I remember
5 also that the new service for the West of Scotland has
6 only been done after I have -- after 1992, when they
7 built the new centre in Glasgow. So I have no answer.
8 Is that acceptable for me to say? I really have
9 no answer. But that was the situation. And we
10 were -- and the staff were all aware of that. And we
11 were actually pleased to see the inspector's comments,
12 in order to, make something about it. But I'm not
13 sure. I think that's all I can say.
14 Q. Just to clarify one point you made there, you said you
15 were very sad when you had to stop making the
16 products. You were referring there, were you, to the
17 closure of the freeze drying plant at the hospital,
18 which meant that you could no longer make freeze-dried
19 cryoprecipitate?
20 A. Yes, yes.
21 Q. And I'm going to come on to ask you some detailed
22 questions about --
23 A. Also that there was not -- there were no other centres
24 that had facilities for this. The facilities have
25 been removed from ordinary transfusion services, and

20

1 put into a fractionation facility or something of that
2 kind. And we remained only to do the -- we continued
3 only to do the simple -- not products, the simple
4 components. That is to say, platelets, red cells,
5 plasma, individual units of cryoprecipitate for use --
6 to be used not mainly for -- not only for haemophilia
7 but mainly for ... I'm sorry, I can't remember, but
8 it's used to stop the bleeding. I forget the name.
9 I did mention that I am running short of words, and
10 I trust you will bear with me about this.

11 Q. Absolutely.

12 A. In a few seconds the word will come about the product.
13 Yes.

14 Q. You've also described that while the inspectors in
15 1982 were saying that really what needs to happen is
16 a new centre needs to be built, you described that
17 that didn't happen during the time that you were in
18 Glasgow, and you left in 1989?

19 A. Yes, I think so. I can't remember when it was built.
20 By the way it's fibrinogen, the word I was looking
21 for. So this is one of the components, not of the
22 products. The products were coming from fractionation
23 centres.

24 Q. If we look now at another document, a little bit later
25 on, SBTS0000406_011. This is another inspection of

21

1 range there from whole blood through to concentrated
2 red cells, platelets, fresh frozen plasma, et cetera,
3 and cryoprecipitate. Dr Gabra, in your statement you
4 suggested that cryoprecipitate was used, as far as you
5 can recall, certainly as part of home treatment for
6 people with haemophilia; is that right?

7 A. It's only very early that it was used for home
8 treatment, but then the home treatment was mainly
9 used -- was when the -- conducted using concentrates.
10 However, it was -- I remember there were fridges that
11 were given to people at home, and they had their
12 stocks of cryoprecipitate, and we used to teach
13 mothers how to give it to children.

14 But that was the very early phase of home
15 treatment and then it became clear that the
16 plasma-derived products by fractionation were the best
17 way to use for these patients.

18 Q. Then if we go over to page 6, I think we can find the
19 answer to the question I asked you earlier and you
20 weren't sure what the answer was. So if we look in
21 the bottom paragraph there, this is the section of
22 "Donor Grouping", and we can see about halfway --
23 about seven lines down, halfway along that line, it
24 says:

25 "As the donor records are held at the Donor

23

1 the centre. Now, this document is not dated. The
2 Inquiry has dated it in March 1988, I understand, from
3 other material, but if we turn over to page 2, we can
4 see at the top there "Glasgow and West of Scotland
5 Blood Transfusion Service", and if we read the first
6 paragraph it says:

7 "Glasgow and West of Scotland BTS serves
8 a population of approximately three million and has
9 its Regional Headquarters and Laboratories at Law
10 Hospital in Carluke. (The Regional Donor Centre is at
11 St Vincent Street in Glasgow.) The Carluke building
12 was erected in 1956. Approximately 150,000 donations
13 are collected annually and around 140 staff are
14 employed at the Centre, which was last inspected in
15 July 1986. Since then, a new sterile suite has been
16 commissioned and brought into use."

17 Then we see the senior staff list. This is just
18 going to give us a snapshot of the centre in 1988: we
19 can see there director Dr Mitchell; four consultants
20 at that stage, including yourself; one senior
21 registrar, principal MLSO; and then three senior chief
22 MLSOs responsible for different areas of the
23 transfusion centre's work.

24 Then if we go over the page to page 3, we can
25 see a list of medical products, and there's a whole

22

1 Centre in Glasgow, the comparison of new results with
2 previous history does not take place in such cases
3 until the K Forms reach St Vincent Street, often some
4 days later."

5 A. Yes, that was quite difficult, I think it was sorted
6 out -- having the donor place away from the centre was
7 a problem, I think. But it was the situation with
8 many other places, I think, who have just recovered
9 from setting up the old set up, that came after the --
10 using the facilities that were left after the Second
11 World War. I may not be correct in what I'm saying,
12 but I'm trying to find a way to explain why these
13 things were happening, only in Glasgow. I can't say
14 that they were only happening in Glasgow.

15 Q. Then if we turn over to page 8, please. We can see
16 four paragraphs down, starting "The procedure for
17 dealing with equivocal and positives", in the section
18 entitled "Virology", it says:

19 "... is the same for both [hepatitis B] and HIV.
20 Initial screen positives are not issued. Virology
21 staff remove all packs the same evening and sign and
22 countersign the Plasma Processing Work Sheet ..."

23 Then it goes on a little bit further down:

24 "If any of these test positive or borderline,
25 the samples are referred to the Hepatitis Reference

24

1 Laboratory at Ruchill Hospital."
 2 Is that -- can you recall whether that is the
 3 laboratory run by Eddie Follett and Brian Dow?
 4 A. I remember that being used to send these things to
 5 Ruchill Hospital for confirmation. Can I just read it
 6 again?
 7 Q. Yes.
 8 A. "The original serum sample is then re-tested, along
 9 with a plasma sample (obtained from Donor Grouping)
 10 and a sample from the original pack pigtail. If any
 11 of these test positive or borderline, the samples are
 12 referred to the Hepatitis Reference Laboratory at
 13 Ruchill Hospital; if all are negative, then the donor
 14 is 'flagged' and three negative donations are required
 15 in a six month period before a donation will be used."
 16 Yes, I remember that this is what happened, yes.
 17 Is that your question?
 18 Q. Yes, yes. Was that the -- your local reference
 19 laboratory, then?
 20 A. Yes.
 21 Q. Was it Ruchill Hospital?
 22 A. Yes.
 23 Q. And do you recall whether and was that the hospital
 24 where Dr Follet and Dr Dow worked?
 25 A. Doctors?

25

1 A. Yes, but it has taken quite some time, but it has been
 2 sorted out, I think. But, yes. Yes, that's what it
 3 says. And I remember that this was happening and
 4 people were -- the staff were feeling more
 5 comfortable, and happier with the developments that
 6 allowed them to do this.
 7 Q. Now you tell us -- Sully, you can take that document
 8 down.
 9 Dr Gabra, you tell us in your witness statement
 10 that the Glasgow Centre collected approximately half
 11 the number of donations that were collected in the
 12 whole of Scotland?
 13 A. That's correct, yes.
 14 Q. And that was based -- why was that? Because the
 15 population of that -- of the -- that you served was so
 16 large?
 17 A. It was a larger area, more hospitals, and we had
 18 access to communities and the units of collection used
 19 to go there. So it is -- it depends on the number of
 20 the population that you serve.
 21 Q. Did you have any role in setting or negotiating the
 22 targets for the Centre, or is that for Dr Mitchell or
 23 others?
 24 A. I think that the targets were discussed, but
 25 I wasn't -- I wouldn't say that I was instrumental

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1 Q. Dr Eddie Follet and Brian Dow?
 2 A. Yes, I remember these two names. Yes. I think --
 3 I think you're right. I think you're right.
 4 Q. Then if we go, please, over to page 10, at the bottom
 5 paragraph, under "Future Planned
 6 Changes/Developments", it talks about delivery vans,
 7 and then:
 8 "The Donor Centre in St Vincent Street, Glasgow,
 9 is being re-furbished with a view to expanding the
 10 activities carried out there to include, for example,
 11 the emergency pooling of platelets."
 12 Then they say they will visit the centre in due
 13 course.
 14 Then lastly, if we go over to page 13, we can
 15 see a rather different conclusion to the one we
 16 looked at from 1982. So we have here "Conclusions":
 17 "The facilities for open-processing are of
 18 a high standard and are well maintained."
 19 Then, "Urgent steps should be taken", in
 20 relation to "manual data handling", and so on.
 21 But is it right to understand from this that
 22 while the centre hadn't been rebuilt by 1988,
 23 improvements had been made to the laboratory services,
 24 and the problems that had been identified for 1982 had
 25 been sorted out, to some extent anyway?

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1 in -- it was a consensus about the needs, and then
 2 this information is brought to the national directors,
 3 and then the national directors were to give the okay
 4 for changes that are required.
 5 Q. Dr Brian McClelland, when he was giving evidence, told
 6 the Inquiry that his recollection was that
 7 the Glasgow Centre sometimes fell short of delivering
 8 on its plasma targets. Is that something that you can
 9 recall?
 10 A. I can't ... I can't remember that. It is surprising.
 11 I'm not sure that this has happened, but I also am not
 12 aware that there were targets. Except that when you
 13 have collected this, you were expecting to send --
 14 for fractionation, that amount. Based on the number
 15 of collections that you have done. But I'm not --
 16 I certainly would not -- so I was not aware that this
 17 is happening.
 18 Q. Can you recall whether there was sufficient PFC factor
 19 products returned to Glasgow to meet the needs of
 20 the population there that required them? So in other
 21 words, was Glasgow self-sufficient, in your
 22 recollection, for factor products during the time you
 23 were there?
 24 A. Yes, I think that there were -- there was enough to
 25 allow, depending on -- there was enough of products

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1 available based on the plasma that was sent outside.
 2 That is to say, I'm not sure that there were shortages
 3 of products provided from Edinburgh, from the ... that
 4 were not expected, I think.
 5 Did I explain what I'm trying to say? Shall
 6 I say it again? Yes?
 7 **Q.** Well, shall -- let me ask the question in a slightly
 8 different way and maybe that might be helpful.
 9 We can go to them if necessary, but there's
 10 evidence to suggest that, certainly in the early
 11 1980s, the Glasgow Haemophilia Centre was using quite
 12 a lot of commercial products. That may have been
 13 a choice or it may have been because there wasn't
 14 enough PFC NHS product for them to use. Can you
 15 recall, or are you able to help us at all with which
 16 is accurate? Did you have any conversations with
 17 Haemophilia Centre Directors about what their
 18 prescribing practice was, whether they preferred
 19 commercial products or PFC products, or were they
 20 asking for more PFC products and you weren't able to
 21 provide them?
 22 **A.** I remember in that period there was shortage all over,
 23 all over, whether in Glasgow, or Edinburgh, or even in
 24 England. And I think that was the time when people
 25 were having to rely on imported products. Because of

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1 product.
 2 Can you recall whether that was a role that was
 3 undertaken at Glasgow, trying to sort of make sure
 4 that the Haemophilia Centre Directors had enough
 5 product and trying to find more if more was needed?
 6 **A.** Yes, I think they were trying to find more products to
 7 use, and that's why -- that's not simply the problem
 8 that was happening in Glasgow, but it was happening in
 9 other parts as well, that's my impression. But
 10 that -- it was a situation of inability to have
 11 available products for the patients.
 12 **Q.** Did you have any role in discussing with your clinical
 13 colleagues their prescribing practices? So, for
 14 example, discussing with them whether or not it would
 15 be better to be prescribing commercial products or NHS
 16 products? Was that part of the role, your role in the
 17 transfusion centre?
 18 **A.** I don't think that my clinicians -- our colleagues,
 19 the clinicians, were to import material -- to use
 20 imported material, if they had products prepared in
 21 Scotland, and when the fractionation centre was
 22 established in Scotland, they were able to use local
 23 products but when you have patients you have to find
 24 what is available and use it.
 25 **Q.** Now, the Inquiry heard evidence from Dr Gillon, and

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1 the changes that has happened in the clinical approach
 2 to treatment of the patients. Whether that was caused
 3 by insufficiency of producing the plasma that is to be
 4 used or it is simply because that is the fact of what
 5 is happening, the use, the clinical use has out
 6 stripping --
 7 **Q.** Outstripping.
 8 **A.** -- outstripping, yes, the available products.
 9 **Q.** Is it right to understand your evidence that there
 10 came a time when there were then sufficient products,
 11 PFC products, I should say?
 12 **A.** There was enough products coming out of PFC, according
 13 to the amount of plasma that was coming in. And
 14 self-sufficiency in Scotland became -- we became aware
 15 of self-sufficiency -- self-insufficiency when the
 16 changes happened in the clinical use of these
 17 products.
 18 **Q.** The Inquiry has seen evidence, again from other
 19 centres, of the transfusion centre being involved in
 20 providing the PFC product to the Haemophilia Centres
 21 and, in some cases, the Haemophilia Centre Director
 22 saying to somebody at the Transfusion Centre "I need
 23 more than you've given me", and the Transfusion Centre
 24 going off and trying to borrow bits of PFC product
 25 from other centres and trying to find more PFC

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1 his impression was that the Glasgow Centre was, using
 2 his words, a bit reluctant to accept new ideas. He
 3 said, "There was always a feeling that Glasgow wanted
 4 to do it their own way". Is that a characterisation
 5 of the Glasgow Centre, as a matter of generality, that
 6 you recognise and understand?
 7 **A.** No, but I thought there are facilities in Glasgow that
 8 were up to the job, and we had to have the resources
 9 continue our work. I mean, these two documents that
 10 you showed were not -- they cannot be accepted by
 11 people working and wanting their work to become
 12 better.
 13 **Q.** I'm going to ask you some questions now about donor
 14 sessions and how those were arranged. I think you've
 15 already told us that some took place in the St Vincent
 16 Street site in Glasgow. Did any take place in the
 17 headquarters at Law?
 18 **A.** No, only -- I think at Law, only those who came for
 19 plasmapheresis.
 20 **Q.** So there was some limited manual plasmapheresis at
 21 Law, was there?
 22 **A.** Yes, yes.
 23 **Q.** So is it right to say, then, that Glasgow mainly got
 24 their donations from mobile sessions in the community
 25 or on blood buses?

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1 A. Yes, yes.
 2 Q. How important were sessions organised at places of
 3 work for Glasgow? Was that a big stream of donations?
 4 A. A big?
 5 Q. Was that -- did that account for quite a lot of the
 6 sessions, sessions organised --
 7 A. Yes, either in factories, or in university places, or
 8 in community places, churches, church places,
 9 et cetera.
 10 Q. So, in terms of plasmapheresis, manual plasmapheresis
 11 in the headquarters in Law, and then if we can just
 12 look at a study that was carried out in Glasgow in
 13 1983 of plasmapheresis, we might be able to get some
 14 information about that. So it's PRSE0003741.
 15 We can see here the date at the bottom,
 16 15 April -- sorry, I don't want to go to that, I beg
 17 your pardon.
 18 It's SBTS -- I don't think we need to go to
 19 this. This is the protocol for the study we're about
 20 to look at, so we I don't think we need to look at
 21 that. So SBTS0000238_104. Yes, this is the one I
 22 want to look at.
 23 So we've got there a report to the Scottish
 24 Directors on "Plasma by Automated Plasmapheresis",
 25 April 1984, and then we've got a picture of Scotland,

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1 "Evaluation of the safety and donor response to
 2 the machine and manual plasmapheresis."
 3 "Evaluation and comparison of the cost and
 4 suitability of both systems to produce source plasma."
 5 Then over the page:
 6 "Evaluation and comparison of the quality of FFP
 7 obtained by the two methods.
 8 "Evaluation and direct comparison of two batches
 9 of fractionated material collected by both methods
 10 from the same donor population, handled and processed
 11 identically to finished intermediate purity
 12 factor VIII concentrate."
 13 If we look down at the results at paragraph 2,
 14 we can see:
 15 "The donor response to the machine was uniformly
 16 favourable and enthusiastic. Indeed as the study
 17 progressed, most of the donors were hinting that they
 18 would be bitterly disappointed if they were not able
 19 to use the machine in the future."
 20 If we go over to page 5, please, we can see the
 21 "Conclusion", which is:
 22 "This study demonstrated that with drive and
 23 enthusiasm on the part of staff, it is possible to
 24 continue to motivate blood donors to remain
 25 enthusiastic in their willingness to supply source

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1 and we can see -- I'm assuming that the bit shaded in
 2 black represents the area covered by Glasgow, the
 3 Glasgow Centre; is that right?
 4 A. Yes, yes and this is the higher -- high population,
 5 yes.
 6 Q. So we can see, if we go over to page 2, it's a study
 7 by Dr Mitchell and by Margaret Morgan. Then it says:
 8 "Following discussions and earlier proposals in
 9 1983, two studies were commissioned by the Scottish
 10 National Blood Transfusion Directors into the
 11 production of source plasma for factor VIII, the first
 12 to compare machine and manual plasmapheresis
 13 collection systems and the second to look at the
 14 option of the optimal additive solution. It was
 15 agreed that the first project would be conducted in
 16 the West of Scotland and the second in the South East.
 17 This report outlines the progress which has been made
 18 in the West of Scotland over the past year from
 19 February 1983 until February 1984."
 20 So then if we go over to page 3 we can see the
 21 questions to be the answered by the study, at the
 22 bottom half of that page:
 23 "Motivation of donors for manual and machine
 24 plasmapheresis: how practical are both options and how
 25 do they compare?"

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1 plasma by both manual and machine methods. The
 2 quality of the plasma is equally good and the costs of
 3 production are very comparable in terms of staffing
 4 and donor safety."
 5 Is it right to understand that prior to this
 6 study, which is dated April 1984, plasmapheresis in
 7 Glasgow was limited to that manual plasmapheresis in
 8 Law. Subsequent to the study, automated pheresis came
 9 onstream in the centre in Glasgow in
 10 St Vincent Street?
 11 A. Yes, yes. I think at that stage as well, there were
 12 a number of plasmapheresis centres -- not manual, but
 13 mechanical plasmapheresis centres -- being introduced
 14 in many parts of the country as well, in England in
 15 particular. I'm not sure whether they have already
 16 started it in Edinburgh or not, but yes, that -- there
 17 was a need, at that stage, to increase the plasma
 18 collection.
 19 And we were starting to feel that we are short,
 20 not in Glasgow, but we in Scotland short of source
 21 plasma or recovered plasma; source plasma from
 22 machines, and recovered plasma from blood banks. It
 23 became clear that we need to increase the plasma
 24 collection for the source plasma.
 25 Q. Was plasmapheresis used to collect, if I can put it

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1 this way, ordinary plasma, as opposed to high-titre
 2 plasma?
 3 **A.** Yes, it used -- I mean, I remember that I used to go
 4 to have some donors with high titre anti-D, to start
 5 on the plasma machines as well. So it became
 6 important, and we were actually -- blood collection
 7 was geared towards plasma rather than red cells. We
 8 were becoming aware that what they need now is not the
 9 red cells and it's not the platelets. It has become
 10 the plasma. Because we needed it for many products,
 11 particularly Factor VIII at that stage, and also other
 12 things, immunoglobulin and that sort of thing.
 13 **Q.** Now we looked earlier at the Medicines Inspectorate
 14 report from 1988 which had a list of products, and
 15 that included platelets that had been recovered by
 16 pheresis but no plasma that had been recovered by
 17 pheresis. Do you think by 1988 there was no plasma by
 18 pheresis? Or do you think that that's perhaps the --
 19 it's just not noted in that report?
 20 **A.** When -- the last report that we read, that was when we
 21 were just thinking -- not we in Glasgow, but Scotland
 22 was just thinking of introducing machines all over
 23 Scotland. We were under the impression that we were
 24 self-sufficient at that stage, until we became aware
 25 that it was -- it has overstripped the available

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1 were improving them all the time.
 2 **Q.** I'm just going to ask you some questions now about
 3 the donor sessions as a matter of generality, and
 4 we'll come on to look at some of the material that was
 5 provided once the AIDS crisis hit a little bit later
 6 on, but just as a matter of generality, is it right to
 7 understand that in Glasgow, rather than providing
 8 donors with a written health questionnaire as we've
 9 seen used in other centres, that actually, it was a --
 10 a donor interview was used, so each donor was asked
 11 a number of questions about how they were feeling and
 12 when they last donated, and those kinds of issues, by
 13 a donor attendant. Can you recall whether that was
 14 the practice?
 15 **A.** Yes, but it was -- I remember that that was written,
 16 written for the donor attendant to read with the
 17 donor.
 18 **Q.** So the donor attendant had a script to read out to the
 19 donor --
 20 **A.** Yes.
 21 **Q.** -- to ask questions, and then the donor attendant
 22 would presumably tick or write in what the answers
 23 were?
 24 **A.** I seem to remember that that was the case, yes.
 25 **Q.** And you, in your statement have stressed the

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1 resources.
 2 **Q.** So you think that by 1988 in fact that was just when
 3 automated pheresis was being brought in, in Glasgow?
 4 **A.** I really can't remember exact dates, but there must be
 5 records for that. Certainly that was -- this trial
 6 and this study that was done, when -- with Margaret
 7 Morgan and Ruthven was the start of introducing -- was
 8 it in '88? I think it was. That report of the study,
 9 it was in '88?
 10 **Q.** That report of the study was in 1984.
 11 **A.** '84?
 12 **Q.** Yes.
 13 **A.** Yes, yes. And that was the date when we started to
 14 think of introducing plasma.
 15 **Q.** Can you recall what was done to try to attract new
 16 donors to Glasgow to donating blood?
 17 **A.** When we -- there was -- there were leaflets, there
 18 were -- I used to go and give talks in places, in
 19 schools and factories, and the usual promotional
 20 systems were used, and improved as time went on.
 21 **Q.** Did you use advertising on the radio or -- that's --
 22 **A.** Yes, yes, all these things. I'm sorry I'm not able to
 23 remember the details, but ...
 24 **Q.** It's a long time ago.
 25 **A.** Yes, but they were things that were happening, and we

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1 importance of the clarity of the donor interview. Can
 2 you tell us a bit about what you meant -- what you
 3 mean by that?
 4 **A.** It's -- so that paper that was written and used by the
 5 nurse or the donor carer, or the doctor, actually, had
 6 to be clear so that the donor was able to answer
 7 correctly, what is expected, what we are trying to
 8 find out, in order to either ask him to continue to
 9 give blood or, for instance, if he says that, "I have
 10 a running nose and throat and I'm not well", they will
 11 tell him to postpone until he -- that sort of thing.
 12 That's what I meant by clarity.
 13 But when the situation came and we were dealing
 14 with hepatitis and HIV, it needed to be clearer than
 15 what it used to be, and I think at that stage we had
 16 to revise our approach to donor selection.
 17 **Q.** Were you able to achieve any privacy for donors when
 18 those interviews were taking place?
 19 **A.** No, I thought they were -- it was done in private.
 20 But if I mentioned something like this, I was thinking
 21 that this is one of the important issues that one has
 22 to take care of that, that this kind of discussion
 23 should be conducted in private.
 24 Yes, it was conducted in private, but privacy is
 25 an important item in making sure that the donor is not

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1 thinking of something else, that other people are
2 hearing. I think it was a general comment that I was
3 saying.

4 **Q.** So your recollection is that in sessions, for example,
5 that took place in church halls or in community
6 locations --

7 **A.** There were facilities and there were screens, I think.
8 Yes, yes. The presence of a screen was an important
9 thing.

10 **MS SCOTT:** Sir, I'm about to start on a different topic
11 and I note the time. I wonder if now would be
12 an appropriate time to take a break.

13 **SIR BRIAN LANGSTAFF:** Yes, well, we will take a break
14 until 11.45.

15 11.45, please, Dr Gabra.

16 **A.** Yes.
17 (11.13 am)

(A short break)

19 (11.44 am)

20 **SIR BRIAN LANGSTAFF:** Ms Scott.

21 **MS SCOTT:** Dr Gabra, I'm going to ask you some questions
22 now about hepatitis. What did you understand about
23 the risk of hepatitis being transmitted by blood and
24 blood products from -- when you took up in your post
25 in Glasgow, in those early years?

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1 negative, and the risk is higher, and the hepatitis
2 and -- sorry, the hepatitis -- the cirrhosis -- yes,
3 the cirrhosis and the cancer was higher in the type of
4 hepatitis that was hepatitis B. So it became clear
5 that that was the -- your question is about when?

6 **Q.** Yes.

7 **A.** I think we started to have an idea about this when we
8 started to see that kind of difference between the
9 patients with hepatitis B and the patients with
10 hepatitis C.

11 **Q.** Were you aware, for example, of Preston's work in
12 1978? He'd published a paper in The Lancet in which
13 he'd biopsied people with haemophilia and discovered
14 cirrhosis, and so on. Were you aware of that paper in
15 1978?

16 **A.** I might have read it but I'm not aware of it now.
17 I think this is when probably we started to think that
18 there are different types of hepatitis infections that
19 we -- are transmitted to our patients.

20 **Q.** I'm going to ask you a question about the practice
21 of -- the selection criteria for hepatitis at Glasgow.
22 So we just look at a document to do that, it's
23 PRSE0001327. We can see here it's called "Guidance
24 for the Selection of Blood Donors", and it says:
25 "The following guidelines represent the

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1 **A.** Yes, that there was still a risk of hepatitis
2 transmitted to patients, of hepatitis B, and also of
3 another type of hepatitis which was called
4 hepatitis -- non-A, non-B hepatitis.

5 **Q.** What was your understanding of the role of pool sizes
6 in the -- in a product's infectivity -- level of
7 infectivity?

8 **A.** Yes, the -- may I add here that, for instance, plasma
9 that was used at some stage was heat treated and was
10 assumed to be -- does not transmit hepatitis, but the
11 known type of hepatitis, the hepatitis B. But the
12 hepatitis C, the non-A, non-B, was still there.

13 So your question is about --

14 **Q.** Pool sizes?

15 **A.** Pool sizes. Yes. The more you give donors -- the
16 larger the pool size, the higher the risk of
17 transmission of infection.

18 **Q.** When did you first become aware that infection with
19 non-A, non-B hepatitis could lead to serious
20 consequences, such as cirrhosis and cancer, hepatic
21 cancer?

22 **A.** Yes, I think we were -- I was aware that it is
23 different from hepatitis B, and the pathology is
24 different. And then we realised that this was linked
25 to the type of hepatitis that was hepatitis B

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1 collective opinion of SNBTS. They may be varied at
2 the professional discretion of the Medical Officer or
3 the Sister at the session, having due regard to the
4 welfare of donors and the safety of recipients.

5 "The decision to accept or defer a donor at the
6 session rests with the Medical Officer or Sister."

7 This version is dated November 1988. Is that
8 a familiar document to you? Is that the guidelines
9 that were used in Glasgow, can you recall? They were
10 the national guidelines.

11 **A.** "The following guidelines" -- I'm just looking at it
12 carefully -- "They may be varied at the
13 professional" --

14 Yes, that was a concern, actually. Not only in
15 Glasgow, but there were no -- that the guidance were
16 not clearly cut and particularly they were medics,
17 doctors, that it is likely they use their clinical
18 discretion, because when we have sisters, we have
19 guidelines for them, and it's very clear, and if it
20 says, "If you do this, and this, and this, it's
21 acceptable; if you do this, and this, and this, it's
22 not acceptable".

23 So the performance of the person who is
24 selecting the donors depended on the availability of
25 clear guidelines for selection and deferral.

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1 Q. Can we turn to page 11 of this document, please. We
2 can see that the guidelines run from A through to Z
3 with different conditions, if you like.

4 A. Yes.

5 Q. Again, does that look familiar to you? Do you think
6 those are the guidelines that were in use in Glasgow?

7 A. I suppose that if this -- if the date puts it into
8 Glasgow period, my Glasgow period, yes. But this is
9 why I'm not saying I am familiar with this one,
10 because it is -- it has become a normal part of this
11 particular activity, that it was -- again, it had to
12 be put into that kind of document for people to
13 follow, rather than depend on their clinical acumen.
14 That is to say we want people to be guided by clear
15 criteria for selection.

16 Q. I'm just going to read out the bit about hepatitis and
17 then ask you a question to see whether you can
18 remember what the practice was in Glasgow. So it's at
19 the bottom of the page there. So if somebody comes
20 presenting with hepatitis, the instruction is:
21 "Childhood jaundice/hepatitis with full
22 recovery -- accept. Jaundice/hepatitis/hepatitis B --
23 Consult Sister or Doctor."

24 Then:

25 "Note for Sister or Doctor: Defer and obtain

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1 hepatitis-free products. And I'm going to start off
2 by looking at your involvement in the Factor VIII
3 Study Group.

4 I'm just going to ask for a document to come up,
5 please, PRSE0001684.

6 This is a letter not to you, it's to Dr Prowse,
7 dated 17 December 1981. It says:

8 "Dear Chris

9 "I am forming an SNBTS Factor VIII Concentrate
10 Study Group which will have the following [members]
11 ..."

12 Then sets out a number of people from PFC, the
13 Edinburgh Centre, and yourself. And it says:

14 "The remit of the Study Group will be to explore
15 new developments in the widest possible sense with
16 regard to the production of factor VIII concentrates
17 and thereby create the opportunity for cross
18 fertilisation and for co-ordinated research within the
19 SNBTS."

20 Do you know why you were invited onto that
21 group?

22 A. Yes, because at that time I was involved in -- I was
23 interested in exactly how to improve the quality and
24 the safety from the products that we are producing,
25 which was the cryoprecipitate at that stage. In

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1 more information from GP. May be acceptable 1 year
2 after full recovery. History of Hepatitis B usually
3 debars. Refer to Centre."

4 So we can see there exactly what you've been
5 talking about, Dr Gabra. There's a discretion, and
6 we've heard different evidence from different
7 witnesses about what they did at their centres. Can
8 you remember what the practice was in Glasgow?

9 A. I understood that this document was from Glasgow, from
10 Scotland.

11 Q. It's for the national -- it's an SNBTS publication.

12 A. Yes, yes. So we should have been using this.

13 Q. Okay, but you can't assist us as to how the discretion
14 would have been exercised? Can you remember how the
15 discretion was exercised?

16 A. When the discretion is actually controlled by what --
17 the note that says "Defer and obtain more information
18 from GP". I think it has reduced the discretion.
19 Like, for instance, the childhood jaundice hepatitis,
20 we will think that this is normal if it is fully
21 recovery, and jaundice and hepatitis B, you have to
22 consult the sister or doctor in order to make the
23 decision to defer.

24 Q. I'm going to ask you some questions now about the
25 steps taken to produce hepatitis-reduced or

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1 Glasgow. And I was working with the team in the
2 Royal Infirmary, and I was working with I think John
3 in order to have -- to prepare for a master's degree
4 or something like that, which I did, it's complete.
5 But it was -- they knew, of course, that I was doing
6 this, my colleagues in Edinburgh, and that's why they
7 asked me to join them. Exactly to make sure that we,
8 as Scottish work, we get together and see how best to
9 do it.

10 And I think there was another gentleman, from
11 Malta I think, who is now working in ... I can't
12 remember where he's working but he's working in the
13 south. And he was not concentrating on -- he was
14 mainly concentrating on the details of the storage,
15 the heating, the freezing, and the -- in order to
16 improve the quality and the amount of Factor VIII in
17 the product.

18 Q. And the work that you were doing was in relation to
19 freeze-dried cryoprecipitate, was it?

20 A. Yes, yes.

21 Q. And I'll come on to ask you questions about that.

22 A. And the standards for the management -- for the
23 measurement of Factor VIII content of the products.

24 Q. And was it a useful study group? Was it helpful?

25 A. Well, at that stage I was very excited about it

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1 because it has linked me with people who -- different
2 people, and I think we have -- it resulted in a -- if
3 I remember correctly, for a study, we used this -- the
4 cryoprecipitate that was produced in Glasgow to make
5 sure that the idea of the small group products is
6 something to consider while we are in the transition
7 period from ordinary cryoprecipitate into the
8 Factor VIII derived by fractionation, which is a large
9 pool, on the assumption that small pool will be less
10 exposure.

11 Q. Let's turn, then, to look at one of the documents, one
12 of the reports that you produced about freeze-dried
13 cryoprecipitate.

14 Could we have, please, PRSE0001701.

15 Here we've got "Report on the production of
16 lyophilised cryoprecipitate", by yourself, dated
17 January 1980.

18 If we go over to page 1 we can see what it says,
19 "Introduction":

20 "The simple method of preparing cryoprecipitate
21 ensures a continuous, reliable supply of Factor VIII
22 prepared at minimum expense in any Transfusion
23 Centre."

24 And then you set out below that the number of
25 donations sent to PFC from Glasgow, and we can see

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1 Q. So if we look down at the bottom of that page, you set
2 out exactly why you're excited about it.

3 "The preparation of dried cryoprecipitate is
4 a reliable technique that has now been successfully
5 adopted by many Transfusion Centres outside the
6 United Kingdom. This dried product should have most
7 of the advantages of the dried NHS Factor VIII
8 concentrates; namely the long shelf life, the easy
9 storage and the pre-determined dosage. It also has
10 the added value of being simple and economical to
11 produce and carries reduced hepatitis risk being
12 prepared from [and if we can go over the page] small
13 pools of donor plasma in short, it is an improved
14 method of storing and dispensing cryoprecipitate.

15 "These are the reports that led to the
16 production team at Glasgow Blood Transfusion Centre to
17 explore the possibility of introducing a lyophilised
18 small pool Factor VIII rich product called
19 'lyophilised cryoprecipitate' by pooling
20 cryoprecipitate from five plasma donations and freeze
21 drying these small pools."

22 Yes, I think when I'm reading this now and when
23 you're reading it, I'm becoming aware that this
24 situation is now available -- is now the situation in
25 many countries of the world, actually, where they have

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1 that that number between 1974 and 1978 is increasing,
2 and there's a corresponding decrease in the amount of
3 blood donations that the Centre is processing itself
4 as cryoprecipitate. Is that what those figures show?

5 A. Yes, yes. And that is normal because -- in previous
6 question that you asked, the facilities were not
7 available, were not enough to properly increase this,
8 and the quality of the good manufacturing practice
9 criteria we were not able to achieve in Glasgow. And
10 also it was becoming nearer the time when viral
11 inactivation procedures were being round the corner.
12 And so the PFC-produced product would have been the
13 best to follow, and that is what has happened. The
14 decision was to -- not to follow the idea of
15 cryoprecipitate, because it reduces the extent of
16 infection, and rely on the plasma fractionation large
17 products on the assumption that we are going to --
18 it's around the corner, the use of the viral
19 inactivation. So it made sense, I think, when we
20 are -- we have to change the whole service in order to
21 stick to an idea of cryoprecipitate, and it's very,
22 very small amount, and it wasn't practical at that
23 stage. And that's why, although I wrote this, it was
24 the thing to be said at that stage, and I was excited
25 about it.

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1 no facilities for fractionation, they can only rely on
2 their plasma, and they can produce it. It's called
3 low -- it's not a complicated procedure. It can be
4 done in any transfusion centre, rather than having to
5 go to wide -- high technology fractionation, of --
6 that is not available in ...

7 So we were at that stage -- at that stage in
8 Glasgow, we were now -- we were in the stages that we
9 are still now in many parts of the world, and they are
10 using this. Because they can produce it in their lab,
11 proper lab, small lab. They can rely on the -- and
12 they don't have the facilities to buy it, to buy the
13 product from the United States or Europe, and also
14 they have -- they can access this very easy.

15 Q. So then if we can turn to another document which sets
16 out -- which is a write-up of the clinical evaluation
17 of this product. It's WITN4035008.

18 So we can see here this is an article written by
19 you, but we can see it's called "Freeze dried
20 cryoprecipitate: a clinical evaluation" published in
21 1983.

22 A. Yes, it's not written by me. It's written by the
23 group led by John Davidson from the Royal Infirmary,
24 with whom I used to work.

25 Q. It says, the summary says:

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"Freeze dried cryoprecipitate was used in the treatment of 14 patients with haemophilia A. The in vivo recovery was 91.2% which is comparable to that reported from other parts of Europe. The product was efficacious and no adverse effects were reported. "Freeze dried cryoprecipitate is the high yield product of a low technology process and as such may be of value in reducing any possible shortfall in the factor VIII requirements of the haemophiliac population of the UK."

And if we then turn to some of the detail, we can see over the page, at page 2, under "Patients":

"Fourteen patients with haemophilia A and without inhibitor to factor VIII C were recruited from the Haemophilia Unit of the Royal Infirmary, Glasgow. Informed consent was obtained for all patients prior to entry to study. Patients were given a dose of factor VIII (nominally 800 IU of factor VIII C) in the form of freeze-dried cryoprecipitate prior to dental surgery. Two patients each received freeze-dried cryoprecipitate on three occasions. In total, 19 doses of freeze-dried cryoprecipitate were given. The freeze-dried cryoprecipitate was prepared one year prior to the start of the study. In all other respects the patients were managed in accordance with

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that -- its lower risk of transmitting virus?

A. At that stage, yes. At that stage. Yes, at that stage.

Q. And is it -- I think you've already said -- you've already alluded to this or said this in your evidence, but is it right to understand that the reason why this didn't go any further was because the freeze-drying plant -- the freeze-drying facilities at Law were closed down?

A. Yes.

Q. That was at the end of 1982, is that --

A. Sorry, can I?

Q. Yes.

A. And there was no facility, and that was at the stage when the facility in Edinburgh was not available. Am I right? I think the dates would suggest this. The dates of writing these papers. I think it was not -- it was just before the decision to have the fractionation facility in place.

Q. Do you know whether any consideration was given to improving the freeze-drying facility and trying to bring it up to scratch?

A. Yes, I knew, and we had figures for these changes, and it became clear that it is not worth doing when we have round the corner the facility to improve what was

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the current practice of the Haemophilia Unit."

Then if we go to the second column on that page, "Discussion", they look, at the bottom of the page, at the disadvantages of it. They say:

"The major disadvantage with this product as with conventional cryoprecipitate is the wide variation in factor VIII C from unit to unit. In this study, factor VIII C ranged from 3.20 IU/ml to 6.20 IU/ml. However, the mean factor VIII C actually given (860 IU) was similar to the factor VIII C nominally present in the 200 ml dose (800 IU).

"A minor disadvantage, especially for home therapy use, is the volume of the reconstituted product."

Then it goes on to give the details of that.

Then setting out below:

"However, the excellent yield and the simple, low cost technology required for its production make this product suitable for further consideration in the UK if the National Health Service protein fractionation centres are unable to meet the demand for factor VIII with the consequent reliance on commercial, imported sources of factor VIII."

A. Yes.

Q. Presumably you would add to that advantage the fact

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happening, in Edinburgh, and also to make sure that the -- that we are looking not very far off from having viral inactivation procedure, that will actually reduce the major issue, that the claim of this product that it is because it is low, it is pool -- small pool product.

So if we have a facility that can deal with large-pool products, and the resources are going to be available, and it is going to be viral inactivated, then I think it makes sense not to look at the needs of current countries in the world that have no resources.

Q. So we know from other information that the freeze-drying plant was closed at the end of December 1982 or January 1983.

A. Yes.

Q. Can you remember whether there was any discussion about the fact that AIDS was becoming known at that stage and that it might be a good idea to try to keep the plant going because of the risk of AIDS?

A. No, I think -- I remember discussions with Ruthven Mitchell, asking him "Why don't we try hard to get this -- to cover the period that we are going through at the moment and have some facilities for this?"

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1 But when we discussed it, it became clear that
2 there is no point in having this done. So it was
3 clear that we would have the facility for
4 fractionation, and also that viral inactivation will
5 be there to rescue the patients from worry about
6 transmission of infection through large-pool products.
7 Q. It was Dr Mitchell, was it, who was expressing the
8 view "Don't worry, viral inactivation is around the
9 corner"?
10 A. No, it wasn't, no. It was known to everyone that
11 things were happening. Yes, things were happening.
12 Q. So that was understood and accepted --
13 A. Yes.
14 Q. -- by all of your colleagues -- you and all of your
15 colleagues?
16 A. Yes, in fact, we have been using also -- heating the
17 plasma before producing the cryoprecipitate, on the
18 assumption that that is going to kill the virus or the
19 viruses.
20 Q. Is that what you were doing when you were doing the
21 freeze drying?
22 A. Yes, yes.
23 Q. You were heating it and freeze drying it?
24 A. We were heating the plasma and doing it.
25 Q. Can you remember what method of viral inactivation was

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1 Q. Do you remember when you read that paper or heard
2 about that paper, do you remember whether you, at that
3 point, were clear in your own mind that there was --
4 that AIDS was caused by an infective agent carried in
5 blood?
6 A. Yes, yes.
7 Q. Was AIDS and the risk of AIDS from blood and blood
8 products something that was discussed amongst you and
9 your colleagues at the Glasgow Centre?
10 A. Yes, it was discussed all over the world, I think, not
11 only in Glasgow.
12 Q. Were you, at the Glasgow Centre, asked to increase
13 production of cryoprecipitate in response to the AIDS
14 crisis?
15 A. I would say that we were not asked but it became clear
16 that we have to do that. But it is possible that we
17 were asked, when the directors sat together, they
18 decided that this is something that we have to look
19 at.
20 Q. So is this right: you don't know whether you were
21 asked, you may have been --
22 A. Yes.
23 Q. -- but it became clear at some point that
24 cryoprecipitate production must increase?
25 A. That's all what we could do in Glasgow, but we can

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1 thought to be round the corner?
2 A. I can't remember exactly. Sorry, I beg your pardon.
3 Q. I'm going to ask you some questions now about your
4 knowledge of AIDS. Can you remember when you first
5 became aware of AIDS and its association with blood
6 and blood products?
7 A. When we heard of the transmission of -- it wasn't
8 called AIDS, but the transmission of this virus to
9 some people in the United States, but I can't remember
10 exactly the paper that was written, where this was
11 reported.
12 Q. Many witnesses have -- there seem to be two standout
13 papers that lodge in witnesses' minds, and I wonder if
14 this helps you at all. So often witnesses say it was
15 when they heard about a baby contracting AIDS after
16 a blood transfusion that they understood there was
17 a link between AIDS and blood and blood products. Do
18 you remember that?
19 A. I can't remember this, no.
20 Q. The other paper that is often mentioned is one that
21 was written up where three people with haemophilia
22 contracted AIDS after using factor concentrates?
23 A. Yes, yes.
24 Q. That was one you recall, was it?
25 A. Yes, yes.

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1 also have in mind to produce extra plasma to be
2 fractionated somewhere else, to increase our plasma
3 collection. And I seem to remember that that was the
4 stage when we started to think seriously about having
5 the plasmapheresis. And it wasn't a Glasgow-only
6 decision; it was a national Scottish decision,
7 I think.
8 Q. Would it have been possible to increase production of
9 cryoprecipitate at Glasgow if you had been asked?
10 A. No, we knew that there were limits. Limits in space,
11 limits in facilities, and limits in access to
12 resources, that we take time to come in order to
13 produce it. That we were doing -- if you look -- if
14 you remember the figures that we were -- that you
15 showed us now, it was -- that I think was the maximum
16 that we could have done, with the existing facilities.
17 Q. And that's the collection of -- the figures we
18 looked at from 1974 to 1978, the production of
19 cryoprecipitate?
20 A. Yes.
21 Q. Those figures we looked at? So to have increased
22 that, above that level, would have been difficult; is
23 that what you say? Because of the lack of space and
24 equipment and so on?
25 A. Yes, yes. And the GMP requirements in particular.

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1 Q. And had Glasgow been committed to doing that anyway,
 2 do you have any -- do you have any idea how long it
 3 would have taken to be able to increase
 4 cryoprecipitate to put in place those steps?

5 A. I'm sure this was discussed, and I'm sure that I had
 6 my thoughts about this, but all what I can say really
 7 is that it would have taken a long time to establish
 8 the facilities in order to increase the
 9 cryoprecipitate when we have fractionation somewhere,
 10 I think, in the country, and we could build
 11 fractionation to improve the fractionation facility in
 12 Scotland.

13 Q. I'm going to ask you some questions now about the
 14 material produced and used at donor sessions in
 15 Glasgow once the AIDS crisis had become evident.
 16 Can we look, please, at PRSE0004816.
 17 Here we've got a leaflet from Glasgow. And it
 18 says:
 19 "Thank you for attending for blood donation. It
 20 is desirable that you should give blood only if you
 21 are in normal health."
 22 Then it sets out a number of questions that the
 23 donor must consider, including whether or not they've
 24 had an infectious disease, et cetera. And then if we
 25 go down to (6):

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1 that right?

2 A. Yes, it looks like an added-in-a-rush sort of thing,
 3 rather than having to wait and -- I'm not sure, the
 4 papers of the early cases, was it '80 or '82?

5 Q. So the cases that I was mentioning to you earlier
 6 was 1982.

7 A. 1982, yes.

8 Q. The baby case, for example, was reported at the end
 9 of 1982.

10 A. Yes, yes. Yes, I'm just putting a link between this
 11 in-a-rush sort of document until -- I think after
 12 that, there must have been something else which was
 13 discussed in -- but with the directors, in order to
 14 have something proper.

15 Q. Do you remember anything about the reaction from
 16 donors to this leaflet being handed out mentioning
 17 AIDS on it?

18 A. Yes, many, many concerns were raised by donors, one of
 19 them is actually being infected if they come to give
 20 blood.

21 Q. You've told us in your witness statement that Glasgow
 22 used the leaflet that Dr McClelland, in Edinburgh,
 23 drew up?

24 A. Yes, I think that probably came after this one.

25 Q. Again, we don't need to go to that but the reference

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1 "HAVE YOU: ... had any serious illness ..."
 2 And it sets out a number of illnesses, including
 3 jaundice, and a number -- and at the bottom it deals
 4 with age limits and anaemia.

5 Then there's a stamp at the bottom:
 6 "Have you heard of AIDS
 7 "(Acquired immunodeficiency syndrome)
 8 "If you have any doubts about giving a donation,
 9 consult with doctor at this session or your own GP or
 10 write in confidence to the regional director."
 11 And then it sets out Dr Mitchell -- it says, to
 12 the right, Dr Mitchell is the director.

13 If we go right to the bottom of the page, there
 14 is a handwritten date, "16/6/83", but there's material
 15 to suggest that this was in place in Scotland -- in
 16 Glasgow, sorry, by the end of May 1983. I don't think
 17 we need to go to it, but for the transcript, there's
 18 a meeting of the SNBTS, PRSE0003620, where Dr Mitchell
 19 says that he put this in place.

20 So is it right, looking at this leaflet, is this
 21 a leaflet that was handed out to donors at sessions?

22 A. Yes, I think that that was the use of this document.

23 Q. And it looks like what's happened is that there is
 24 a leaflet which doesn't mention AIDS, and then a stamp
 25 has been put at the bottom onto the old leaflet; is

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1 for the transcript of that leaflet is -- I'll just
 2 check I've got the right reference, actually.

3 A. I hope it was.

4 Q. It's PRSE0004850. I don't think we need to go to
 5 that, we've looked at it in other hearings.

6 We've heard from other witnesses that in their
 7 transfusion centres, they've had opportunities for
 8 donors who realise partway through the donor session,
 9 because of material they've been provided, that
 10 they're high risk and shouldn't donate. Opportunities
 11 for them to be able to exit the donor process
 12 without -- confidentially, without it, being
 13 obvious --

14 A. Yes.

15 Q. -- what they're doing, were there any such
 16 opportunities in Glasgow? Were donors able to exit
 17 the session partway through the donation if they
 18 realised that they were high risk?

19 A. I honestly can't remember that this was the fact. But
 20 it sounds as though, in my mind, that this is the
 21 right thing to do, and that's probably when
 22 I mentioned the confidentiality, and to be -- to have
 23 -- it has to be done with a lot of care not to
 24 cause -- not to let the donor, if he's going to go
 25 out, everybody will know that he is going to be --

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1 that he is suspected of having this disease.
 2 And there are ways of -- that have happened, but
 3 I can't remember when, where we have taken -- people
 4 have taken the unit, and with a label that this is not
 5 to be used. And I'm not sure when did this start,
 6 whether this started when I was in Glasgow or when
 7 I was in the WHO, because it was -- it would have been
 8 a major problem in countries where there is no
 9 confidentiality, people are sitting together, they're
 10 chatting about everything. So I'm not sure exactly
 11 how to say when this -- this is quite a sensible
 12 thing, to make sure that people are not --
 13 Q. Can we look now at another document, SBTS0000169_079.
 14 So we've got here -- oh, that's not the right --
 15 sorry, SBTS -- no, that's not the right document.
 16 Try this one: SBTS0000680_171. That's the right
 17 document.
 18 A. Yes.
 19 Q. 24 April 1987, it's a letter from you to Dr Mitchell,
 20 and you're talking in the beginning of the letter
 21 about Clause 4 of the national AIDS leaflet and
 22 I don't need to trouble you with that. It's the third
 23 and fourth paragraph I wanted to ask you about. So
 24 you say this:
 25 "I also feel we have no option but to accept the

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1 embarrassing questioning or enquiries by the medical
 2 staff -- either it applies or it does not."
 3 Was there a sense that asking donors about, for
 4 example, their sexual practices, would be embarrassing
 5 and shouldn't be done?
 6 A. Well, at that stage it was. At that stage, that's why
 7 I felt that these are all embarrassing things for the
 8 donors. And if it has to be done, it has to be done
 9 in a very careful way and to make sure that the donor
 10 is not offended, and also that our patients are safe,
 11 and there must be a way.
 12 And we have lived with that all the time since
 13 the appearance of the AIDS epidemic, that happened in
 14 that time. We have lived with systems that allowed
 15 respect for the donors and also safety of the
 16 patients.
 17 Q. What you're there saying is: look, these criteria need
 18 to be really clear so that it's not necessary for
 19 donor attendants to have to ask questions and it is
 20 not necessary for donors to have to ask, "Do I fit
 21 into this criteria, I can't work it out".
 22 A. No, I don't think so. I think we have to do it but it
 23 has to be done in a very special way. I mean, how are
 24 we going to accept that they are saying the truth? We
 25 are not able to say that if they are saying the truth

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1 word of the donors as 'truthful' this is the
 2 paradoxical strength of the voluntary altruistic donor
 3 system and its major weakness.
 4 "It is impractical and unworkable to consider
 5 the donors answer to our check list as suspect because
 6 they are 'compulsive liars' or 'embarrassed' by their
 7 colleagues or wives etc."
 8 Just pausing there, can you recall, or does this
 9 tell us anything about the view that was taken by
 10 Glasgow, the donor attendants and the clinicians --
 11 sorry, at the centre, about the way that they must
 12 treat and deal with donors.
 13 A. I think, from the letter, you can feel that I was
 14 totally convinced about this approach from donors, to
 15 make sure that donors are not embarrassed or put into
 16 a situation that is not comfortable for them. But, at
 17 the same time, we have to make sure that there are
 18 other ways to deal with infected donations that come
 19 into the system, which are not written in this letter.
 20 But I am actually defending the relationship
 21 between donors and the service, that we have to accept
 22 that they are truthful in what they say, and that it's
 23 our job to make sure that our products are safe.
 24 Q. You say -- you go on at the last sentence there:
 25 "Clause 4 is clear, it does not require

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1 or not, and that's why I felt that it is important to
 2 make sure that this is done in a very special way, in
 3 order to help them, to think properly about the
 4 question and also to be honest in their --
 5 And this happens all the time, with donors. We
 6 have to encourage them to think about what has
 7 happened yesterday, last week, some times when they
 8 were on holiday, et cetera. We have to provide them
 9 with the environment in order to get from them the
 10 truth.
 11 Q. Can we then look at a document which helps us
 12 understand the impact of AIDS literature on donor
 13 numbers, at Glasgow. That's SBTS0000033_033.
 14 This is a letter from Dr Mitchell to Dr Cash,
 15 dated 4 March 1986, and it says:
 16 "At the Directors' meeting last week, there was
 17 discussion about how we might investigate the adverse
 18 effects, if any, on donor pre-conceptions about
 19 unwarranted fears of contracting AIDS by giving blood.
 20 For what it is worth, I would like to present the
 21 following data from October 12 to the end of
 22 December 1984 and [similar period in 1985] to compare
 23 the three months after introduction of the test for
 24 anti HTLV-III with the previous year for the same
 25 period of time."

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1 Then he sets out the figures. So we can see
2 that in 1984, 49,568 donor recall letters were issued
3 with donor attendances at 71 per cent; and 1985, many
4 fewer donor recall letters were issued, 39,185, but
5 with an attendance of 86 per cent. Then the
6 conclusion that Dr Mitchell draws is set out below,
7 and he says:

8 "You will see that, as I previously indicated to
9 you some months ago, the figures do not suggest that
10 there has been any major loss of donors as a result of
11 the HTLV-III publicity."

12 Is that how you remember it?

13 A. No, but the figures -- the figures don't say this, but
14 I remember that there was a drop in the donors. And
15 this has not only happened in Glasgow, it has happened
16 in many, many places. And it has stayed for a long,
17 long time, actually. In many European countries as
18 well. And it was very difficult to persuade them that
19 when they come to give blood, they are not going to be
20 infected. Did I answer your question?

21 Q. Yes. You did. Thank you.

22 I'm going to ask you now about HIV screening.

23 Can you recall whether, when HIV screening was
24 introduced nationally through the Blood Transfusion
25 Service, whether in your -- in the Glasgow area and

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1 I want to look at paragraph 146, but just to put
2 it in context you're being asked questions about what
3 counselling and psychological services were available
4 for donors who tested positive for hepatitis or HIV.
5 And you say this:

6 "Details of the donor were referred
7 confidentially to a senior member of the medical staff
8 adequately trained in counselling procedures."

9 Just pausing there, was that you or was that one
10 of your colleagues?

11 A. Not only -- yes, that was -- yes. And we used to have
12 a session to discuss the donor's care in cases that
13 the donor is referred properly and handled properly
14 without -- just making sure -- and make sure that he
15 is properly handled and taking good care of him, and
16 having all the following steps available in order to
17 make sure that he is properly -- he is given all the
18 care that is required.

19 Q. I'm sorry, I asked you a question which wasn't very
20 clear. My fault.

21 Was that you, the senior member of clinical
22 staff, adequately trained?

23 A. There were other colleagues who were doing that.

24 I remember two other consultants who were doing that.

25 Q. As well as you?

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1 the West of Scotland, Glasgow and West of Scotland,
2 was there screening in the community as well? So at
3 GPs or sexual health clinics?

4 A. Sorry, I hear your question but I couldn't exactly --

5 Q. Yes. Can you recall whether there was screening for
6 HIV in the community at the same time as there was
7 screening in the Blood Service?

8 A. Ah, yes, yes. And that was also a worry, that people
9 will come to the Transfusion Service in order to have
10 the screening done without saying that, "I'm coming to
11 make sure that I don't have this infection". And that
12 was quite a problem, actually.

13 Q. And was there screening? Could they go elsewhere, to
14 the GP or the sexual health clinic?

15 A. I'm not sure about that, but I knew that there were
16 people who used to come to Transfusion Service. And
17 that's why in some places they -- before introducing
18 the testing in the Service, they made sure that it's
19 available for the community outside.

20 Q. Can I turn to a paragraph in your witness statement if
21 we can just have that, WITN5495001.

22 And you're being asked questions about what
23 counselling and psychological services -- sorry,
24 that's your statement. If we could turn to page 40,
25 please.

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1 A. Yes. Yes.

2 Q. And we've heard from other witnesses about a training
3 session being delivered in St Mary's Hospital in
4 Paddington, London --

5 A. Yes.

6 Q. -- for HIV counselling. Did you go to that training
7 session?

8 A. May be that I have gone but I'm not sure, really.

9 Q. Then it goes on:

10 "Communication with the donor was conducted
11 using a specially worded letter with an invitation to
12 come to the centre to repeat testing of a fresh blood
13 sample. Donors, once confirmed positive for HIV
14 findings, were invited for face-to-face counselling in
15 the presence of an HIV counsellor to be taken over for
16 management at one of the specialised NHS departments
17 in the region. Donors with false positive results
18 were also informed without delay and reassured on the
19 telephone."

20 So it's the -- I want to ask you about the
21 face-to-face counselling in the presence of an
22 HIV counsellor. So what can you recall about that,
23 who the HIV counsellor was, what their role was?

24 A. By this time, I was in Birmingham, and there were
25 established units to manage patients with HIV

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1 infection. And we had access, we had made arrangement
2 in order to invite one of the counsellors from this
3 unit to come and attend the meeting with the donor, to
4 make sure that that person would be -- that donor will
5 be followed up by someone who has already met him.
6 This is to say there will be continuity in the
7 follow-up of this donor. So that was not a member of
8 the National Blood Transfusion; he was the person at
9 the end of the day who would be looking after this
10 person when he is referred to the Centre. And, of
11 course, after agreement of the donor that this is
12 going to take place.

13 Can I add also something about the training
14 and -- my training and the training? Why I remembered
15 I haven't attended. The document of the WHO, by the
16 way, about counselling donors before giving blood that
17 was issued after the AIDS problem, I was member of
18 this leaflet that was produced by the WHO Global Blood
19 Safety Initiative, and I participated in writing this
20 paper. So that was probably the way I was considering
21 myself in some way I had some training in counselling.

22 Q. I'm going to ask you some questions now about
23 high risk donors. Did you attend sessions in prisons,
24 do you recall?

25 A. No, never. And I was, from the start, unhappy about

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1 taken from military personnel at military barracks or
2 the like?

3 A. Yes, I knew that it is taking, yes. And -- because
4 I think there was a separate transfusion service for
5 the military forces.

6 Q. And --

7 A. But later on that was stopped and they were supplied
8 by the Service.

9 Q. Did you have any concerns about whether or not they --
10 those donors were truly voluntary?

11 A. Well, in my way of thinking, yes, they're not supposed
12 to be pushed into or asked, "Yes, sir, I'll have to go
13 and give blood."

14 Q. I'm going to move topic now to surrogate testing and
15 in particular to ALT testing. Is it right to
16 understand your statement that you thought that ALT
17 testing was introduced in Glasgow?

18 A. It was introduced, but not to be used. It was
19 introduced, I think, to -- as a way -- as
20 an exercise -- a research exercise.

21 Q. So it wasn't introduced as a screening test --

22 A. No.

23 Q. -- across the --

24 A. No, it wasn't.

25 Q. -- the service?

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1 going to prisons, because we believed that donors are
2 voluntary donors, they are not donors that are -- they
3 can say -- they are quite free to say yes or no.
4 There may be other incentives for them to come and
5 give blood.

6 Q. So you were worried that they weren't truly voluntary
7 if they were prisoners?

8 A. Yes, yes. They are why -- there is another word for
9 them. They are ... not free donors.

10 Q. Were you aware that Glasgow was the last centre to
11 phase out prison donors?

12 A. No, I was surprised.

13 Q. Were you able to talk to speak to Dr Mitchell about
14 your concerns about prison donation?

15 A. Yes, I have said that. No, not about prison
16 donations, but about the voluntary aspects of
17 donations in general.

18 Q. But you didn't speak about prison donation --

19 A. No, while I was working there, that it was one of the
20 other sessions that they go to.

21 Q. Okay, so you weren't aware they were doing sessions at
22 prisons?

23 A. Because I also thought that this is a national thing
24 not to have sessions in prisons.

25 Q. Do you know whether or not there were any sessions

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1 A. The virology department was interested in looking at
2 this and I think there was a paper published. That
3 was at the time of John Wallace.

4 Q. I'm going to move now to your time as the blood
5 programme adviser to the League of the Red Cross and
6 the Red Crescent Societies. Can you just tell us
7 a little bit about what that involved?

8 A. It was part of, as it -- as the name implies, it's
9 a Global Blood Safety Initiative. And it was, in many
10 ways, using the HIV epidemic to make sure that blood
11 products are safe from any other viruses, that's to
12 say including hepatitis B and non-A, non-B hepatitis.
13 And this meant that three things: to make sure that
14 the testing procedures are available; the blood
15 supply -- the blood supply is as safe as possible; and
16 reduce the use of blood as much as possible. I think
17 these are the main factors.

18 And so it was a national -- international
19 programme where we visited the countries, we checked
20 what are the requirements in order to provide them
21 with testing facilities, and guide them to the proper
22 use of blood and making sure that donors are cared
23 for.

24 Q. So if we look at one of the consensus statements that
25 you were involved with, it's NHBT0000030_048. We can

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1 see there "Global Blood Safety Initiative, Consensus
2 Statement of Screening of Blood Donations for
3 Infectious Agents Transmissible through Blood
4 Transfusion", and we can see what it is:
5 "The Global Blood Safety Initiative ... is
6 a cooperative endeavour to support the development of
7 safe and effective blood transfusion services in all
8 countries."
9 Then sets out who the core participants are.
10 Then the second paragraph:
11 "This document was reviewed and endorsed by the
12 GBSI Consultation on Screening of Blood Donations for
13 Infectious Agents Transmissible through Blood
14 Transfusion, held in Geneva [in
15 January/February 1990]. Sixteen specialists in
16 transfusion medicine and haematology from 12 countries
17 participated. The participants are listed at the end
18 of this document."
19 If we go then to page 12, we can see who that
20 includes, and there's a list of participants which
21 includes, from England, Dr Ala, the director of the
22 West Midlands Regional Transfusion Centre, and
23 Dr Barbara then we can see various other participants
24 from America, France, Gambia, Finland, Australia,
25 et cetera.

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1 "Anti-HCV tests are available but expensive, and
2 there is an urgent need for development of less
3 expensive screening tests."
4 So, just pausing there, what seems to be
5 suggested, is this right, that hepatitis C testing is
6 desirable but because it's expensive it's not
7 mandated; is that right?
8 **A.** It's not -- yes, it can't be available for those
9 countries.
10 **Q.** So is it right -- so the expectation, is it, that if
11 a country can afford HCV testing they really ought to
12 be doing it?
13 **A.** I'm afraid that this is the problem. It's not my
14 answer, it is the problem, actually. And I can see
15 that number 3, we are suggesting to use the ALT,
16 I think, the anti-HBc.
17 **Q.** Can you remember whether number 2 was a controversial
18 recommendation or whether that was widely accepted?
19 **A.** No, it's not -- well -- "Anti-HCV tests are available
20 but expensive, and there is an urgent need for
21 development of less expensive screening tests", so
22 they are actually asking people to look at less
23 expensive screening tests because they cannot afford,
24 these people, they cannot afford to have the test. So
25 it is a problem.

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1 Then, if we go down to the bottom of that page,
2 under the "Secretariat", we can see your name, fourth
3 down, "Blood Programme Adviser, League of Red Cross
4 and Red Crescent Societies, Geneva", and there were
5 a number of other members of the secretariat, which go
6 on over the other page as well.
7 So if we turn back, then, to page 1, we can see
8 the aim of the document under "Introduction":
9 "The aim of this document is to provide guidance
10 for formulating policies to reduce the risk of
11 transmission of infectious agents by blood and blood
12 products. This includes careful selection of blood
13 donors and performance appropriate screening tests."
14 Then if we turn, please, to page 6, we can see
15 the various recommendations are made, if we go down
16 the page, first of all about HBV, which I won't
17 trouble you with, and then non-A, non-B hepatitis. It
18 says:
19 "It is recommended that there should be studies
20 of the epidemiology of HCV infection throughout the
21 world."
22 "Due to the serious nature of HCV-related
23 disease, it is desirable to screen blood donations for
24 anti-HCV."
25 It says:

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1 **Q.** I'm going to turn next to your time in Birmingham in
2 the West Midlands centre.
3 **SIR BRIAN LANGSTAFF:** Just before we do, the date of that,
4 the document has on it "91.1" at the top, which would
5 suggest it was a 1991 document. Do you have any
6 information as to the precise date?
7 **A.** You're asking me?
8 **SIR BRIAN LANGSTAFF:** No, I'm asking counsel.
9 **MS SCOTT:** Ah, yes, sir, the only information we have is
10 the bit that I read out on page 1, which says that
11 this document was reviewed and endorsed by the people
12 we looked at, at a meeting held in Geneva, 30 January
13 to 1 February 1990.
14 **SIR BRIAN LANGSTAFF:** Right. So 1990 document, and we
15 have Dr Ala and Dr Barbara both signing up to
16 a document which suggests that HCV testing should be
17 introduced, in effect?
18 **MS SCOTT:** Yes, that's correct.
19 Moving on, then, Dr Gabra, to your time in
20 Birmingham, in the West Midlands.
21 Just to remind ourselves of the timetable --
22 sorry, of when you arrived in the West Midlands. So
23 you arrived there in 1992. Was Dr Ala the Centre
24 Director when you arrived?
25 **A.** Yes. Yes.

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1 Q. And had he been in post since 1982?

2 A. I can't remember when he was there. I can't remember.

3 Q. And you tell us in your statement that the

4 headquarters of the centre itself were based in

5 Birmingham, but that the centre had three static

6 sites, ten mobile blood collection teams, and annually

7 collected 250,000 donations, or approximately

8 10,000 donations a day?

9 A. Yes.

10 Q. And it formed part of the Western Division of the

11 Blood Transfusion Service, and so you attended some of

12 the Western Division meetings?

13 A. Yes.

14 Q. I think your witness statement also tells us that

15 the geographic -- or the population that it covered

16 was 5.2 million, with 24 regional and university

17 hospitals being serviced by the centre?

18 A. Yes, I -- as far as I remember, these are the figures.

19 Q. And you also tell us that, as a consultant in the

20 early years there, you were responsible for clinical

21 aspects of irregular antibodies and red cell serology

22 teams, the medical aspects of blood collection and

23 donation teams, which involved clinical support,

24 counselling, including follow-up plans for clinical

25 support, care of donors with transfusion-transmitted

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1 I can say, "This is" -- "This compares to this". But

2 in general I think that I could feel that what is

3 happening in London, in Birmingham, is a much

4 smaller -- is a much larger -- what's happening in

5 Birmingham, as part of England, is a much smaller unit

6 compared to what is happening between Glasgow and

7 Scotland, so ... Because in Glasgow it was almost half

8 of the population, but in our case in Birmingham it

9 was 10 per cent of the population sort of thing.

10 I could feel that many of the things that I

11 found very difficult that needed to be changed at that

12 time, in 1982, are not -- they are not a problem,

13 because we are simply concerned with the production --

14 the collection of blood, the much closer relationship

15 with the hospital teams. We have hospital transfusion

16 committees -- that term was created, which was an

17 excellent thing that John Wallace was trying to

18 establish over there. And also that the running of

19 what -- of the Services were in a much better shape

20 compared to what I have been working with in Scotland

21 in 1980. So there was a difference. And I am

22 assuming that -- I mean, I remember that when we were

23 in Scotland, when the UK was trying to introduce

24 serious quality assurance systems, there were many

25 people from Scotland who were invited into Birmingham

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1 infections, and referral of such donors for

2 appropriate management, as well as liaison with all

3 Midland hospitals and the promotion of the activities

4 of the transfusion committees.

5 Were those, broadly speaking, your areas of

6 responsibility?

7 A. I was what, sorry?

8 Q. Was that, broadly speaking, your areas of

9 responsibility?

10 A. Yes, yes.

11 Q. Then, once you became the lead medical consultant

12 in 1995, you became responsible for the co-ordination

13 of all medical matters in the centre and with the

14 hospitals in the region?

15 A. Yes, with the assistance of my consultant colleagues.

16 That's to say, looking after bits and pieces around.

17 Q. Just before we break for lunch, I wonder if I could

18 just ask you some general questions about your

19 impression of the differences between the Service in

20 England and the Service in Scotland.

21 A. Well, first of all, I think that it's difficult to

22 compare them because they are different age groups.

23 One of them was in the 80s and one -- the second one

24 is '92 or something like that. So it is -- it's not

25 difficult, but it is not the same level of whether

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1 in order to tell them about what they are doing

2 regarding quality. But that was, again, not in '82

3 but it was in the late '90s, sort of thing.

4 I think that's all what I can say. If you want

5 to ask me specifically about other issues -- I mean,

6 there was no facilities for preparing other than

7 components; platelets, et cetera, and blood, that's

8 it. But in Birmingham there was the facility for

9 fraction -- almost some kind of fractionation, and

10 plasma production in order to be sent to the army

11 for -- that's all, for the use of patients who have

12 been colleagues, emergency volume expansion was in

13 plasma.

14 So it was a different set-up what is happening

15 in Glasgow, while in -- the modern approach to

16 transfusion practice was available in Birmingham when

17 I went. At that time, it was not -- it was the future

18 of what was happening, what was to happen in Glasgow,

19 and it so happened that -- by creating a new centre,

20 which wasn't using (*unclear*), and the facilities for

21 fractionation was left to the industrial type of

22 service, rather than the clinical hospital-based

23 facilities.

24 MS SCOTT: I note the time, sir. It's just after 1.00.

25 I wonder if now is a good time to break. I've

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1 probably got about half an hour left of questions to
2 ask Dr Gabra, a few documents to take him to from his
3 time in Birmingham, in the West Midlands, but not
4 terribly much.

5 **SIR BRIAN LANGSTAFF:** Yes. Well, I wondered how much you
6 had to go. I think, given that it's half an hour,
7 yes, we'll take a break now.

8 So we'll come back at 2.00, please, doctor, if
9 that would be all right. So 2.00, and then we shall,
10 shortly after that, finish the questions which
11 Ms Scott has to ask, and there may then be a further
12 short break before the last round of questions which
13 those who have been listening will put forward to
14 Ms Scott for her to ask you.

15 So 2.00.

16 (1.04 pm)

(The Luncheon Adjournment)

18 (2.00 pm)

19 **SIR BRIAN LANGSTAFF:** Yes?

20 **MS SCOTT:** Dr Gabra, before the break you were giving some
21 evidence about the differences between England and
22 Scotland, and one of the things you mentioned, one of
23 the differences you mentioned was liaison with your
24 clinical in the West Midlands.

25 Can you tell us a little bit more about what

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1 difficulties with blood testing -- with the blood
2 group testing of patients, and if there are difficult
3 findings, they refer the specimen for us to confirm
4 the results. So it was a much -- and I think this --
5 it wasn't just an invention in Birmingham; it was
6 established in different ways in the rest of the UK,
7 and I have a feeling that this is also, as has become
8 an important system in Scotland as well --

9 **Q.** And -- sorry.

10 **A.** -- and in many parts of the world, actually.

11 **Q.** You said you found it very helpful. Why was it --
12 what was helpful about it?

13 **A.** Well, when we used to have difficulties in
14 understanding the clinical approach to the way they
15 use the blood, and the presence of guidelines wasn't
16 all that effective, unless there is that kind of
17 personal relationships between. And so I used to
18 attend, for instance, four hospitals, I remember, and
19 I used to go and attend these meetings and be
20 available and have one topic to talk to them about,
21 and so on.

22 So it is -- and we used to have people from the
23 hospitals to train them if they needed training in
24 testing, or anything of that kind, or storage, or --
25 and so on. So, in many ways, it has been helpfully --

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1 that liaison entailed?

2 **A.** Ah, yes, yes. We had in place a system called
3 hospital transfusion practice units, and every
4 hospital had a hospital blood -- you see why I'm
5 running short of things -- it's a unit in each
6 hospital that deals with transfusion, and it includes
7 training of -- using the national guidelines and
8 discussing them with the clinicians, training special
9 people in the transfusion laboratory, either a nurse
10 or a technician, to be available to give advice, to
11 train young clinicians about the use of blood, the
12 safe use of blood, and it was a -- and one of us
13 would -- the 23 or 24 hospitals, I can't remember --
14 were divided into groups between the number of medics.
15 We have also introduced a system whereby a person,
16 a consultant, is part -- part of his commitment is to
17 be in charge of the laboratory in that particular
18 hospital.

19 So there are joint, joint positions where they
20 are linked, closely linked with the Transfusion
21 Service. And that is one thing about the
22 relationship, yes, and we found this extremely
23 helpful, and also there is a technician --
24 laboratory -- a laboratory technician who is
25 responsible for assisting if there are any

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1 has facilitated what used to happen in the early days
2 when they just wanted the red stuff, and that's it,
3 that's it.

4 **Q.** The transfusion committees, were those formal
5 meetings? Was there a transfusion committee in each
6 hospital?

7 **A.** Yes.

8 **Q.** They used -- can you describe what your input into the
9 transfusion committees was?

10 **A.** It's to answer any questions about why this product
11 was not there and what are the specific uses of this
12 product, et cetera. And I think that there has been
13 also a national approach about safe transfusion
14 practice, and it was our role, and it was easier to
15 get through when there was a national approach, and
16 then there is the presence, the personal presence with
17 the colleagues of this particular hospital.

18 **Q.** So was one of the topics of conversation and
19 discussion between you and your clinical colleagues
20 the safe transfusion of blood and blood products, the
21 minimising of the use of blood and blood products?

22 **A.** Yes, we used to give them statistical findings,
23 statistics of the use of blood, the blood donation,
24 the stocks that are available, the use of certain
25 groups, instead of others, in order to minimise the

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problems of, for instance, using the O negative all the time, when it was another way to deal with that particular patient, et cetera. So this is -- these are the sort of things.

And, for instance, I would discuss with them the outcome of an audit that we prepared about the uses -- their uses, et cetera, and how the use of blood for certain clinical conditions, and to make sure that there is no excessive wastage in the blood, in the use of platelets for instance.

And when something new is introduced, like having platelets suspended into fluid, different fluid, or having additives to the platelets, or extending the shelf life of the platelets, these are some things that keep coming, and it was only, I think, twice a year.

Q. I'm going to ask you questions about HCV -- hepatitis C look-back. Can we start please by looking at NHBT0097145_001, so 0097145_001.

Now, this is a letter from Professor Cash to Dr Ala, dated 19 May -- so it's not a letter to or from you -- and it's headed "Look-Back for Recipients of Anti-HCV Positive Blood Products". I'm just going to read out the letter and then ask you some questions about it.

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Can we go over the page, please.

"Our own careful investigation (including liver biopsy) of over 100 donors infected with HCV up to 20 years ago through needle-sharing, clearly suggests a generally benign long-term prognosis.

"IF and anti-viral drugs [I think there must be a word missing there] are both toxic and costly.

"Experience with this form of therapy is too brief to judge the longer-term benefits or, indeed, its possible adverse effects.

"It now transpires that early evidence of viral clearance is often succeeded by later reappearance of viral RNA.

"It is therefore far too early to conclude that the evidence for amelioration of HCV-related disease by combined therapy is so compelling that we will have erred in failing to call in and investigate recipients of anti-HCV positive blood."

I don't think we need the next paragraph, and then:

"It will now be very difficult for England and Wales to resist the irrational pressure to adopt a similar premature, expensive, and largely fruitless policy, and I greatly regret this fait-accompli we are now faced with."

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It starts off by saying:

"I am interested to learn that the Scottish Office suddenly and spontaneously feels vulnerable to potential press criticism because of BTS failure to institute a 'look-back' policy for recipients of blood products from donors later found to be anti-HCV positive.

"As I remember it, you raised this issue at a SACTTI meeting last year, because data from Dr Dusheiko suggested that over 60% of patients with HCV-related liver disease treated by the combined administration of gamma-interferon and ribavirin experienced some (unspecified) form of remission. In consequence, it was your feeling that it would not be ethically 'correct' to deprive past recipients of anti-HCV positive blood of the potential benefits offered by combined drug therapy and counselling.

"We have not had access to Dr Dusheiko's data, of course, and it is therefore impossible to judge its merits. What other acknowledged experts in the field have told me, however [there's an asterisk and we'll see who those experts are], is that:

"HCV-related liver disease is far from being a homogenous condition, and we do not know anything about the type of patients Dr Dushenko studied."

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So this is Dr Ala's view about the proposed HCV look-back. He describes there that he'd been told in 1994 that HCV is generally a benign and long-term prognosis. Was that a common understanding in 1994 of HCV -- of hepatitis C?

A. I'm not sure that this was the common, no.

Q. He also expresses the concern about instituting a hepatitis C look-back programme, because he is not persuaded that the information about the treatment for hepatitis C is sufficient. Again, was that a common view, can you recall, held by your colleagues and perhaps by yourself at the time, about the hepatitis C look-back?

A. No, I understood that a look-back has to be based on clear criteria that are -- and I feel -- I felt that Dr Ala did not want to become involved -- not to become involved, to consider this without additional information. Because that would be -- that really needs to start based on clear findings that it is just the right time now to start the -- he wasn't saying that we should not do the feedback -- the look-back, but he was saying that we should wait until we're absolutely sure that this is a necessary thing at that time.

Q. Although in your witness statement you accept the

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1 ethical obligation to inform patients that they
 2 have -- are suffering from a virus that they've
 3 obtained through their medical treatment?
 4 A. Yes, I said that, yes.
 5 Q. Is Dr Ala --
 6 A. But, yes, this doesn't mean that I am saying that
 7 I have to do it now. I think what Dr Ala was trying
 8 to say -- and that's what I understood, and that's
 9 what I believed at that stage -- that before we start
 10 our national look-back, introduce the look-back
 11 system, we have to be very clear about what is exactly
 12 the outcome, how are we going to do it, how are we
 13 going to set this up, and so on.
 14 Q. So your concern was to make sure that the look-back
 15 was properly organised before it started?
 16 A. That's what I was saying, yes.
 17 Q. Were you responsible for the look-back at --
 18 A. Yes, at the end, yes. I was the person from
 19 Birmingham who did this, but I can't remember when was
 20 this done after that letter. It's not very -- it's
 21 quite some time now, and I can't remember exactly and
 22 I haven't seen this letter -- I have seen it when it
 23 was presented to me among the documents. But I can't
 24 remember having seen that, or maybe I was convinced
 25 completely that this was the right thing to do. We

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1 The arrangement that we had was with the
 2 department of liver diseases, a superb team there, and
 3 we would simply -- we have made the arrangement that
 4 when this happens, they -- to have them sent there for
 5 follow-up. And it was -- so it wasn't all that
 6 worrying to have someone as a -- it was an easier bit
 7 of information to pass on to the patients.

8 And at that time also there was treatment for
 9 this. So in fact there was a nice message at the end
 10 to give to the patient, that, "You will have good
 11 treatment in this -- with this (*unclear*)".

12 Q. So if we look now at a document which tells us what
 13 the results were of the look-back in West Midlands,
 14 it's NHBT0116570.

15 Can we go straight to page 16, please, of that
 16 document.

17 A. Is that a paper?

18 Q. If we go ... um --

19 A. No.

20 Q. Sorry, page 13, sorry. Page 13.

21 So here we've got a consultation paper dated
 22 May 1999 prepared by Dr Iain Blair for an ad hoc
 23 hepatitis C working group on behalf of Birmingham
 24 Health Authority.

25 Now, we know from other papers, and I think

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1 have to wait until it's properly organised. And we
 2 did it, actually.

3 Q. So, yes, that's really the next question. Was it
 4 properly organised by the time it started?

5 A. Yes, yes, yes, and everybody -- it took a long time,
 6 and it was so time consuming, not for us, but also for
 7 the hospitals, and they really needed to have support
 8 in order to be able to look into the documents,
 9 et cetera. So it was good that it was very well
 10 organised.

11 Q. This morning you were giving evidence about the
 12 counselling arrangements when somebody was given
 13 a diagnosis -- when a donor tested positive for HIV
 14 and, in Birmingham, you were telling us about the HIV
 15 counsellor being present.

16 A. Yes.

17 Q. Was there a similar arrangement when a donor tested
 18 positive for hepatitis C? Was there a counsellor
 19 present in those circumstances?

20 A. Oh, yes, but it wasn't that alarming as the HIV, and
 21 that -- and we have been living with hepatitis for
 22 a long time, and people were familiar with this idea.
 23 But when it is HIV, it was rather more serious, and
 24 they were going to be looked after by a specialist for
 25 infectious diseases, particularly HIV.

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1 you've been provided with them, Dr Gabra, that you
 2 provided some information to Dr Blair to put into his
 3 report.

4 And if we turn, please, to page 37, we can see
 5 the bit of the report that relates to the hepatitis C
 6 look-back, the "Hepatitis C and Blood Donors", and the
 7 second paragraph down he talks about the prevalence at
 8 the Birmingham Centre of 1:20,394 being comparable
 9 with the overall UK prevalence of 1:21,772.

10 If we go over the page, please, to page 38, he
 11 sets out under "Hepatitis C Look-Back Programme" -- he
 12 sets out the history there, the test being introduced
 13 in September '91, setting out what that is.

14 Then about halfway down that paragraph:

15 "A total of 164 donors were identified in this
 16 region, giving a total of 1,256 components which were
 17 transfused."

18 Then refers to a table that shows that
 19 39 recipients in this region were found to be anti-HCV
 20 positive.

21 If we go then to the next page, we can see there
 22 the "Outcome of the Look Back exercise", and at the
 23 bottom of that table it says, "Further details from
 24 [yourself]". So he says out of the total at the
 25 bottom, of 1,243, we see that: 348 had died; 397

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1 untraceable; no response for 284; 16 unsuitable for
 2 follow-up; 39 donors positive; 115 donors negative;
 3 pending, 44.
 4 Is that how you recall it?
 5 A. Yes, yes. I submitted this report, and yes, it is --
 6 I remember, you know, sharing and preparing this, yes.
 7 Q. Then the last document I wanted to take you to on
 8 hepatitis C is at PRSE0000620.
 9 This is an article published in the
 10 Epidemiol Infect, and it's called "The contribution of
 11 transfusion to HCV infection in England", and you're
 12 listed as one of the authors of that paper.
 13 A. Yes.
 14 Q. And if we look at the aim of this paper, which is at
 15 the bottom right-hand column on this page, four lines
 16 up from the bottom, halfway along that line:
 17 "The aim of this look-back was to diagnose
 18 patients with transfusion-transmitted HCV who might
 19 benefit from care and treatment."
 20 Then if we go over the page, please, to page 4,
 21 to the discussion, it says this:
 22 "These data, and the probabilities derived from
 23 them, give an indication of the likely number of
 24 transfusion-transmitted HCV infections, and of the
 25 contribution that transfusion has made to HCV

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1 infected with HCV via transfusion, of which about
 2 5,200 will still be alive?
 3 A. Where is this?
 4 Q. Well, it's -- or of which 8,300 would have died.
 5 A. 8,300?
 6 Q. Yes. Of those, would have been expected to have died
 7 by the end of 1995.
 8 A. Yes. Yes.
 9 Q. And the correlation of that is that 5,000 --
 10 approximately 5,200 of that cohort would still be
 11 alive.
 12 A. Yes, that was the finding, yes.
 13 Q. Then if we look at the second finding, which is, we
 14 find, on page 5, on the first column of page 5, if we
 15 go three lines down. That's not right, sorry. Can we
 16 zoom out again.
 17 Sorry, that's page 3. Can we go to page 5, yes.
 18 So on the left-hand column, if we start three lines
 19 down at the end of that line:
 20 "If the prevalence of anti-HCV amongst blood
 21 donors during the 1970s [so different cohort] was
 22 assumed to be the same as at the end of 1991,
 23 inclusion of the 1970s data would generate
 24 approximately 10 000 extra HCV-infected blood
 25 recipients. As with estimates for the 1980s, over 61%

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1 infection in England. There were, by necessity, many
 2 assumptions and extrapolations used, and the results
 3 are not therefore expected to be exact."
 4 And if we go down to the bottom of that column,
 5 we can see another caveat there, right at the bottom,
 6 the last paragraph.
 7 "We may have underestimated or overestimated the
 8 infections transmitted from 1 January 1980 to
 9 1 September 1991 ..."
 10 And then sets out why that might be an
 11 overestimate or an underestimate.
 12 Then if we look on to the first column on that
 13 page, at the bottom, we can see what that estimate of
 14 those -- that cohort is, the infections in the 1980s,
 15 effectively:
 16 "In total, we therefore estimated that there
 17 have been approximately 13,500 HCV infections
 18 transmitted by HCV-infected blood components issued
 19 between 1 January 1980 and 1 September 1991. Over
 20 8,300 (61%) of those were either known or expected to
 21 have died by the end of 1995."
 22 So is it right to understand that what this
 23 article is saying is: doing the best we can, with all
 24 the caveats that we've just looked at, between
 25 1 January 1980 and 1 September 1991, 13,500 people

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1 of those would be expected to have died by 1995 --
 2 probably well above this figure, considering the
 3 greater average age of those recipients. If the
 4 average age of transfusion has stayed fairly constant
 5 over the years, 60% of those recipients infected
 6 during the 1970s would have been born prior to 1920,
 7 ie would have been at least 75 years old by 1995."
 8 So again, is it -- is the finding that if you
 9 look at -- if you make the same -- take the same
 10 assumptions for the cohort transfused in the 1970s,
 11 doing the best you can, estimate is approximately
 12 10,000 HCV infections from blood transfusion, of which
 13 61 per cent, so 6,100, would at least have expected to
 14 have died.
 15 A. And they would not have the treatment available.
 16 Q. Because?
 17 A. Because it was not available.
 18 Q. But we're looking now at the end of '95.
 19 A. Yes.
 20 Q. So those were -- so putting those two figures
 21 together, what, as I understand it, this study finds
 22 is that between 1970 and 1 September 1991, the study
 23 estimates that there will be alive a cohort of
 24 transfused patients who have been infected with
 25 hepatitis C and the number of those patients that are

100

1 still alive would be somewhere about 9,200.

2 **SIR BRIAN LANGSTAFF:** I think 9,100 --

3 **MS SCOTT:** Sorry, 9,100.

4 **SIR BRIAN LANGSTAFF:** -- on the maths, but it's very
5 approximate.

6 **MS SCOTT:** Yes, it is very approximate, yes.

7 **A.** Yes.

8 **Q.** So, lastly from me, then, Dr Gabra, is just to ask you
9 some questions about some of the statements that you
10 make in your statement about the National Blood
11 Authority. You say in your statement that the
12 reorganisation of the service in 1995 took a lot of
13 time and effort and caused difficulties that could
14 have been avoided and were, in your view, unnecessary.
15 Can you tell us a little bit about that?

16 **A.** It's the same as -- reorganisations usually bring with
17 them difficult issues to sort out. But it was -- the
18 service was running all right and it could have been
19 done in a slightly different way. I can't find
20 specifically, but all what I can remember, that I was
21 finding it extremely difficult at that stage to deal
22 with the quick and fast changes that have happened,
23 and I also found that my contribution was not -- our
24 contribution as a medical staff in the service was
25 being run in a totally different way, that was not

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1 needed, into the Transfusion Service, were slightly
2 different from what happens at a -- in other things,
3 in other areas. So it was helpful from the new
4 service that we have a special funding specifically
5 for the Transfusion Service.

6 **Q.** I said lastly from me, but in fact can I just in fact
7 raise one more topic with you before we break in order
8 for me to get questions from the Core Participants for
9 the final session.

10 Can we return, please, to WITN4035008.

11 So what's going to come up on your screen,
12 Dr Gabra, is the write-up of the clinical evaluation
13 of the freeze-dried cryoprecipitate that we were
14 talking about before the break, the lunchtime break.

15 I just wanted to take you to the bit that says,
16 "Material and methods", because you -- we were
17 discussing the process, and I think you mentioned that
18 there was heating involved, and I just wanted to run
19 this past you. So the "Material and methods":

20 "Freeze dried cryoprecipitate was prepared as
21 described previously."

22 Then there's a reference to another article:

23 "The method involved the collection of
24 a donation of blood into a triple plastic blood
25 collecting pack containing citrate phosphate dextrose

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1 allowing us to contribute the same way as to what we
2 were doing before. So it was, at that time -- and
3 I still think that my title has changed two times or
4 three times, and people were moved from one place to
5 the other, and there were changes that I thought were
6 not all that important, and that's really all the
7 feeling that I had.

8 **Q.** One of the things you say in your statement was that
9 there was a period -- you were talking about the
10 strengths and weaknesses of the National Blood
11 Authority and you said that there was a difficulty
12 during that period in securing funding.

13 **A.** Yes, yes.

14 **Q.** Do you recall -- what did you mean by that?

15 **A.** The funds was coming from the Local Health Authority,
16 and when we became the national service, and I think
17 it was Dr Gunson who organised this, we were able to
18 have support, particularly from the funding point of
19 view for any changes that need to be done. It was
20 easier to get through the NHS directly, rather than
21 through the local funds that were put into the -- that
22 were put aside for the use of the Local Health
23 Authority rather than the National Health Authority.

24 So it had to be shared with so many other
25 things, why the changes that were coming in were

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1 as anti-coagulant. Plasma was separated by
2 centrifugation and the plasma pack was immediately
3 frozen in an alcohol, solid carbon dioxide mixture,
4 kept at -70°C for a minimum of 20 [minutes].

5 "Cryoprecipitate was prepared by thawing the
6 plasma in a thermostatically controlled water bath at
7 4°C until only a small amount of ice remained in the
8 pack. The pack was removed from the water bath,
9 centrifuged at 3200g for 10 [minutes] at 4°C and
10 supernatant plasma transferred to remaining satellite
11 pack.

12 "Cryoprecipitate was allowed to liquify at 22°C
13 and cryoprecipitates from five donations were pooled
14 under sterile conditions. The product was then frozen
15 and lyophilised."

16 It then goes on to say how it was tested and
17 reconstituted, and so on.

18 There's no mention there of heating. Was this
19 the process you followed?

20 **A.** Yes, yes. That was it. I think I have -- I think
21 I have confused my answer with something else that was
22 something to come later on rather than being done.

23 **MS SCOTT:** Thank you.

24 Sir, those are the questions that I have for
25 Dr Gabra, but I will need an opportunity to field any

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1 questions from Core Participants. Could I ask for
2 25 minutes or until 3.00?

3 **SIR BRIAN LANGSTAFF:** Yes, well, we will take a break
4 until 3.00 in that case.

5 The purpose of the break, Dr Gabra, is so that
6 participants in the Inquiry, who won't put their own
7 questions but have questions to ask you, will ask
8 them -- will ask counsel to put those questions to you
9 when we come back. So we'll take a break until 3.00.
10 I can't tell you how long we will be after that. It
11 may be quite quick, it may take some time. It all
12 depends. But I will see you again at 3.00. 3.00.

13 (2.37 pm)

14 (A short break)

15 (3.02 pm)

16 **SIR BRIAN LANGSTAFF:** Yes, Ms Scott?

17 **MS SCOTT:** Dr Gabra, I've got a handful of questions to
18 ask you from the Core Participants. What geographical
19 area was served by the West of Scotland Blood
20 Transfusion Service?

21 **A.** It was half of the Scottish population, but I can't
22 remember figures, I'm sorry.

23 **SIR BRIAN LANGSTAFF:** I think we saw a map of that, didn't
24 we, Ms Scott, at one stage in one of the documents?

25 **MS SCOTT:** We did, yes.

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1 where he has gone without me, if you see what I mean.

2 **Q.** The more remote hospitals, would you have contact
3 with -- would you go and visit even the more remote
4 hospitals?

5 **A.** I'm sorry, I'm not able to give you the correct --
6 the information that I -- I didn't -- I can't remember
7 knowing that the faraway hospitals were visited. But
8 certainly the -- it was easy for instance, in
9 Birmingham, to contact these hospitals. Particularly
10 the high usage was just across the border from --
11 across the street from the Centre. So in fact I think
12 it most likely that the faraway hospitals were not
13 visited. The high -- the low usage hospitals were not
14 visited but not all hospitals.

15 **Q.** The Inquiry has heard evidence from Dr Brian
16 McClelland that the area served by the Glasgow
17 Transfusion Service was one of the worst areas for
18 social and economic deprivation. What role did the
19 economic position of the region have on the Centre's
20 ability to collect blood and blood components?

21 **A.** I'm not sure, actually, that this is because they are
22 poor they don't come and give blood. I'm not sure
23 that this is a fact, because many of the donors are
24 people who are not really quite well off. And that's
25 not only the -- the practice. I think in England,

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1 **A.** But it doesn't, does it -- it shows that it is a small
2 part of a large Scotland, but the population was
3 higher than the rest.

4 **Q.** Can you recall whether it included the Western Isles?
5 Did it cover the Western Isles, can you remember?

6 **SIR BRIAN LANGSTAFF:** The map didn't. It covered some, so
7 I think it went up as far as, probably, I would think,
8 about as far as Mull, but I don't know that it went as
9 far as Skye, I'd have to check again.

10 **MS SCOTT:** I don't think it did, sir.

11 **A.** I'm sorry, I can't remember.

12 **Q.** Thank you. Did you have regular contact with
13 hospitals outside Glasgow City?

14 **A.** Yes, we served outside Glasgow City, yes, yes. All
15 hospitals in the West Midlands were covered by the
16 Glasgow service. That is as far as I remember and
17 I think that this is correct.

18 **Q.** So when you were giving evidence about going, first of
19 all, with Dr Wallace and then, subsequently, to meet
20 with clinicians and talk about the use of blood, it
21 was all over the region, was it, all over the area?

22 **A.** No, it was -- when I first met him, he was starting --
23 he was visiting Stirling, by the way, where I used to
24 work. So it wasn't just Glasgow. It was other
25 places, but I wouldn't be able to remember exactly

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1 that was also the case. But I am -- I really don't
2 want to become involved in -- in making my views that
3 are not based on facts. But poor people are as good
4 as rich people in giving blood.

5 **Q.** When I was asking you -- well, firstly can I ask this
6 general question first. Was any form of heating of
7 blood or blood components or plasma-derived products
8 ever researched or implemented, to your knowledge --

9 **A.** Yes.

10 **Q.** -- in the Western Blood Transfusion Service, Western
11 Scotland?

12 **A.** Yes, our plasma used to be heated to a certain
13 degree -- I can't remember the figure -- and used as
14 heated plasma. Yes.

15 **Q.** When was that? Can you remember when that was?

16 **A.** No, I can't remember, really. But that was the plasma
17 that was issued. It was heat-treated plasma, it was
18 in big tanks, and I think it's 60 degrees, not more
19 than that, and for a specific time. I'm sorry,
20 I can't remember the details. But that is -- that
21 must be available in the products, yes.

22 **Q.** Do you know --

23 **A.** And -- so sorry, can I --

24 **Q.** Yes, of course.

25 **A.** You mentioned the treatment of plasma, which

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1 I unfortunately gave you the wrong example. The
 2 current cryoprecipitate that is used at the moment now
 3 is actually viral inactivated. So I was actually
 4 thinking of that this was the initial -- but our
 5 material was not viral -- but at the moment it's viral
 6 inactivated but not by heating. Not by heating, by
 7 something else. And that's why it is safe as well.
 8 **Q.** So the plasma that you were heating in the West of
 9 Scotland was heated, do you think --
 10 **SIR BRIAN LANGSTAFF:** Well, have we actually decided that
 11 it was in the West of Scotland that the plasma was
 12 heated?
 13 Dr Gabra, when you talk about the plasma being
 14 heated to 60 degrees or whatever, where did the
 15 heating take place?
 16 **A.** I can remember distinctly that it was done downstairs.
 17 **SIR BRIAN LANGSTAFF:** So actually in Law Hospital?
 18 **A.** Yes, in the centre, which is at Law Hospital.
 19 **SIR BRIAN LANGSTAFF:** Thank you.
 20 **MS SCOTT:** And you --
 21 **A.** I have a feeling that it was also done in Edinburgh.
 22 **Q.** At PFC?
 23 **A.** No, no, no, downstairs also in Edinburgh. They had
 24 facility for plasma.
 25 **Q.** That was going to be my next question. Do you know if

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1 heated at the West of Scotland Transfusion Centre over
 2 a many years or just for a few months --
 3 **A.** No, for all the plasma that was sent out. Plasma was
 4 used in different forms. It was used in fluid, it was
 5 used in the bags, it was used in dried plasma as well,
 6 drying and then re-suspension. So that was one of the
 7 types of plasma.
 8 **Q.** I was asking you questions about whether the Centre
 9 could have increased its production of cryoprecipitate
 10 in response to the AIDS crisis, and you gave some
 11 evidence that it would take a long time and you would
 12 need staff and equipment and so on.
 13 **A.** It would be impractical.
 14 **Q.** Were you referring at that point to freeze-dried
 15 cryoprecipitate or conventional cryoprecipitate?
 16 **A.** It was freeze dried.
 17 **Q.** Freeze dried. So --
 18 **A.** What else -- there is a suspension with it.
 19 **Q.** So if you had been asked to increase your production
 20 of conventional cryoprecipitate, would that have been
 21 easier, would that have been achievable in a shorter
 22 time frame?
 23 **A.** No, no. It's the same. The basic process is the
 24 same.
 25 **Q.** So the limitations were the same whether it was freeze

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1 any other centres were heating plasma? But you think
 2 Edinburgh was?
 3 **A.** Yes, I am not very sure about lots of things at the
 4 moment, but I think I am very sure about this.
 5 **Q.** You think it was heated to 60 degrees. Can you recall
 6 how long it was heated for?
 7 **A.** No, I think I ought to look at how this was done
 8 before I put my foot again into a something incorrect.
 9 **Q.** What was the purpose of heating it, what was the point
 10 of it?
 11 **A.** It was to make it safer, viral inactivation of some
 12 sort. And had I feeling it reduced the transmission
 13 of infection. I don't want to go into things that
 14 weren't -- that I was involved in 40 years ago.
 15 **Q.** Do you think there would have been clinical evaluation
 16 of that heated plasma product?
 17 **A.** I have a feeling that this must have happened because
 18 it was done as a sort of routine, it was a routine for
 19 all plasma that was in the bottles.
 20 **Q.** Is your recollection that that took place over a long
 21 period of time or a short period of time?
 22 **A.** Short period of time.
 23 **Q.** Short period of time?
 24 **A.** Yes, yes, yes. You mean the process of heating?
 25 **Q.** Yes, sorry, my question is not very clear. Was plasma

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1 dried or conventional cryoprecipitate?
 2 **A.** Yes, but freeze dried, it was easier to store, it was
 3 easier to know the donors that you're giving, from the
 4 batches that you're using, et cetera.
 5 **Q.** I asked you some questions about whether or not the
 6 centre took blood from military establishments, and
 7 you said that you thought that it had had sessions in
 8 military establishments. Are you aware of whether or
 9 not blood was taken from US citizens, ie US military
 10 personnel stationed in Scotland?
 11 **A.** I don't know about that.
 12 **Q.** You don't know about that.
 13 **A.** And even the fact that we used to have it,
 14 I understand that the military service at the moment
 15 takes blood from the Transfusion Service, from our
 16 donors, not from their donors. They don't have
 17 facilities for that collection from their donors.
 18 **MS SCOTT:** Sir, those are the questions from core
 19 participants that I was going to ask Dr Gabra.
 20 **SIR BRIAN LANGSTAFF:** Yes. Well, I don't myself have any
 21 questions.
 22 **MS SCOTT:** I understand that Dr Gabra's representatives
 23 don't have any questions either.
 24 So, Dr Gabra, is there anything that you would
 25 like to add to your evidence and say now?

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1 A. No, not really. But in the time when I was working in
2 Glasgow, I really thought that I felt that we were
3 doing an excellent job, and when I travelled all over
4 the place, I realised that the Service in the UK,
5 I could dare to say it was second to none, from every
6 point of view, because it -- we cannot just talk about
7 Glasgow or about Birmingham. We have to talk about
8 the National Transfusion Services elsewhere. And
9 I have seen, wherever I have visited, that we were
10 doing excellent service for the community, and
11 excellent service mainly for our donors as well.

12 So, of course, I'm sad and I'm sad that -- and
13 I consider that this is a terrible thing to lose
14 patients like this, like what has happened, but
15 I think that the best that could have been done has
16 been done, and I'm sad that -- I share the pain of
17 those who lost their patients, their members of their
18 family and their loved ones. It is sad.

19 But it is -- transfusion service is not a joke,
20 it is a very serious thing, and the transfusion of
21 blood. And it is not without its complications. Look
22 how many people I have -- when I gave ordinary
23 cryoprecipitate to little patients in 1970, many of
24 them have had terrible pains in joints and many of
25 them have died. So it is itself a very serious

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1 centre that was available, and I'm sure that many
2 people have been affected by these shortcomings that
3 we were having in the Service, early in the days after
4 discovering the Factor VIII for treatment of patients.

5 So when -- I have had radiotherapy for cancer of
6 the prostate, and it was my decision, and I knew that
7 there were problems that are going to happen, but many
8 people don't know the problems that happen, the side
9 effects that happen from this.

10 So I'm sorry to say a personal thing like this
11 but this is an example for people who actually have
12 treatments and they suffer from the side effects
13 without realising that we medics, we are terrible
14 people. We use things to help them but, at the same
15 time, there is -- it's not all that safe, and
16 transfusion service is one -- transfusion medicine is
17 one of them. It is all the time up until now we have
18 terrible problems that happen from errors and
19 mistakes, and so on. I hope you do not mind that
20 I have spoken this way.

21 **SIR BRIAN LANGSTAFF:** No, not at all. It's very much
22 appreciated that you've given your time and the best
23 of your recollection over that long period to us in
24 an attempt to help. So thank you for that.

25 A. Thank you.

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1 condition, and I'm sad that this has happened, and we
2 haven't been able to find recourse for the
3 non-A, non-B until 1997 or -- so that's really all
4 I wanted to say.

5 It's not a difference, but I'm convinced, and
6 I have given all my life for safety of blood,
7 et cetera. And I don't think that I have been all
8 that successful, or we have not been all that
9 successful as an organisation anywhere in the world.
10 That's really all what I wanted to say.

11 **SIR BRIAN LANGSTAFF:** Well, thank you very much indeed for
12 being prepared to give evidence to us. It can't be
13 easy, I think, in a career which has lasted more than
14 60 years, since you first became a doctor in Cairo, to
15 remember everything that has happened, because you've
16 been through a number of different jobs, in a number
17 of different places, with a lot of different people.
18 And you've done your best to struggle with some of the
19 difficulties, I think, of giving evidence and
20 remembering.

21 Yes? You wanted to say something?

22 A. I just wanted to mention also that when I first
23 started, they were about to -- there were centres in
24 the UK that were still collecting blood in bottles.
25 And I have seen the changes, and it was only one

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1 **SIR BRIAN LANGSTAFF:** Ms Scott. Tomorrow?

2 **MS SCOTT:** Tomorrow we have evidence from Dr Boulton
3 starting at 10.00.

4 **SIR BRIAN LANGSTAFF:** So 10.00 tomorrow, Dr Boulton.
5 (3.21 pm)

6 (Adjourned until 10.00 am the following day)

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1	I N D E X	
2	DR GAMAL GABRA (sworn)	2
3	Questioned by MS SCOTT	2
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<p>MS SCOTT: [19] 2/22 2/24 14/24 41/10 41/21 80/9 80/18 84/24 85/20 101/3 101/6 104/23 105/17 105/25 106/10 109/20 112/18 112/22 116/2 SIR BRIAN LANGSTAFF: [33] 1/5 1/7 1/10 1/24 2/2 2/4 2/6 2/9 2/17 2/21 2/23 14/23 41/13 41/20 80/3 80/8 80/14 85/5 85/19 101/2 101/4 105/3 105/16 105/23 106/6 109/10 109/17 109/19 112/20 114/11 115/21 116/1 116/4 THE WITNESS: [8] 1/6 1/9 1/23 2/1 2/3 2/5 2/7 2/16</p> <hr/> <p>' '80 [1] 63/4 '82 [2] 63/4 84/2 '84 [1] 38/11 '88 [2] 38/8 38/9 '90s [1] 84/3 '91 [1] 96/13 '92 [1] 82/24 '92 or [1] 82/24 '95 [1] 100/18 'compulsive [1] 66/6 'correct [1] 90/15 'embarrassed [1] 66/6 'flagged [1] 25/14 'high [1] 18/11 'look [1] 90/5 'lyophilised [1] 51/19 'truthful [1] 66/1</p> <hr/> <p>- -- and [1] 52/11 -- in [1] 108/10 -- it [1] 64/23 -- there [1] 111/18 -70 [1] 104/4</p> <hr/> <p>0 000 [1] 99/24 001 [2] 89/19 89/19 006 [3] 14/23 14/24 14/25 0097145 [1] 89/19 011 [1] 21/25 033 [1] 68/13 048 [1] 76/25 079 [1] 65/13</p>	<p>1 1 February 1990 [1] 80/13 1 January 1980 [3] 98/8 98/19 98/25 1 September 1991 [3] 98/9 98/25 100/22 1 year [1] 46/1 1,243 [1] 96/25 1,256 [1] 96/16 1.00 [1] 84/24 1.04 [1] 85/16 10 [4] 26/4 83/9 99/24 104/9 10,000 [1] 100/12 10,000 donations [1] 81/8 10.00 [4] 1/2 116/3 116/4 116/6 10.03 [1] 1/4 100 [2] 1/14 91/3 104 [1] 33/21 11 [3] 16/23 17/11 45/1 11.13 [1] 41/17 11.15 [1] 2/10 11.44 [1] 41/19 11.45 [2] 41/14 41/15 115 donors [1] 97/2 118 [1] 17/17 119 [1] 17/21 12 [6] 16/23 16/25 17/16 68/21 77/16 77/19 12 months [1] 19/1 122 [1] 18/1 123 [1] 18/5 124 [1] 18/8 125 [1] 18/11 129 [2] 18/14 18/15 13 [3] 26/14 95/20 95/20 13,500 [1] 98/17 13,500 people [1] 98/25 14 [2] 17/5 53/2 140 [1] 22/13 146 [1] 71/1 15 April [1] 33/16 150,000 [1] 22/12 16 [2] 95/15 97/1 16/6/83 [1] 62/14 164 [1] 96/15 17 December 1981 [1] 47/7 17 January 1980 [1] 15/9 171 [1] 65/16 19 doses [1] 53/22 19 May [1] 89/21 1920 [1] 100/6</p>	<p>1946 [1] 7/21 1956 [1] 22/12 1970 [4] 3/3 3/3 100/22 113/23 1970s [4] 99/21 99/23 100/6 100/10 1972 [3] 3/3 3/21 3/21 1974 [6] 3/21 4/23 7/18 8/10 50/1 60/18 1976 [1] 8/3 1978 [4] 43/12 43/15 50/1 60/18 1980 [9] 5/6 8/10 12/16 15/9 49/17 83/21 98/8 98/19 98/25 1980s [3] 29/11 98/14 99/25 1981 [1] 47/7 1982 [14] 15/2 16/6 16/20 19/12 21/15 26/16 26/24 55/11 56/15 63/6 63/7 63/9 81/1 83/12 1983 [6] 33/13 34/9 34/19 52/21 56/15 62/16 1984 [6] 33/25 34/19 36/6 38/10 68/22 69/2 1985 [2] 68/22 69/3 1986 [2] 22/15 68/15 1987 [1] 65/19 1988 [7] 22/2 22/18 26/22 37/14 37/17 38/2 44/7 1989 [4] 5/5 6/23 8/8 21/18 1990 [3] 77/15 80/13 80/14 1991 [6] 80/5 98/9 98/19 98/25 99/22 100/22 1992 [3] 7/6 20/6 80/23 1994 [2] 92/3 92/4 1995 [6] 82/12 98/21 99/7 100/1 100/7 101/12 1997 [1] 114/3 1999 [1] 95/22 1:20,394 [1] 96/8 1:21,772 [1] 96/9</p> <hr/> <p>2 2.00 [4] 85/8 85/9 85/15 85/18 2.37 [1] 105/13 20 [1] 104/4 20 years [1] 91/4 200 [1] 54/11 2003 [1] 7/15 2022 [1] 1/1</p>	<p>22 [2] 17/2 104/12 23 [1] 86/13 24 [2] 81/16 86/13 24 April 1987 [1] 65/19 25 minutes [1] 105/2 250,000 donations [1] 81/7 284 [1] 97/1</p> <hr/> <p>3 3 February [1] 1/1 3.00 [5] 105/2 105/4 105/9 105/12 105/12 3.02 [1] 105/15 3.20 [1] 54/8 3.21 [1] 116/5 30 January [1] 80/12 30 per cent [1] 9/22 3200g [1] 104/9 348 [1] 96/25 37 [1] 96/4 38 [1] 96/10 39 donors [1] 97/2 39 recipients [1] 96/19 39,185 [1] 69/4 397 [1] 96/25</p> <hr/> <p>4 4 March 1986 [1] 68/15 40 [1] 70/24 40 per cent [1] 9/23 40 years [1] 110/14 44 [1] 97/3 49,568 [1] 69/2</p> <hr/> <p>5 5,000 [1] 99/9 5,200 [2] 99/2 99/10 5.2 million [1] 81/16</p> <hr/> <p>6 6,100 [1] 100/13 6.20 [1] 54/8 60 [2] 90/10 100/5 60 degrees [3] 108/18 109/14 110/5 60 per cent [1] 9/24 60 years [1] 114/14 61 [3] 98/20 99/25 100/13</p> <hr/> <p>7 70 [1] 104/4 71 [1] 69/3 75 years [1] 100/7</p> <hr/> <p>8 8,300 [3] 98/20 99/4 99/5</p>	<p>800 [1] 54/11 800 IU [1] 53/18 80s [1] 82/23 83 [1] 62/14 86 [1] 69/5 860 IU [1] 54/10</p> <hr/> <p>9 9,100 [2] 101/2 101/3 9,200 [1] 101/1 91.1 [1] 80/4 91.2 [1] 53/3</p> <hr/> <p>A A, [2] 42/12 114/3 ability [1] 107/20 able [19] 29/15 29/20 31/22 33/13 35/18 38/22 40/6 40/17 50/9 61/3 64/11 64/16 67/25 74/13 94/8 102/17 106/25 107/5 114/2 about [134] about prison [1] 74/18 above [2] 60/22 100/2 absence [1] 19/5 absolutely [2] 21/11 92/23 abuse [1] 8/22 accept [8] 11/7 32/2 44/5 45/22 65/25 66/21 67/24 92/25 acceptable [4] 20/8 44/21 44/22 46/1 acceptance [1] 8/24 accepted [3] 32/10 57/12 79/18 accepting [1] 10/16 access [5] 27/18 52/14 60/11 73/1 90/18 accompli [1] 91/24 accordance [1] 53/25 according [2] 14/14 30/12 account [1] 33/5 accurate [1] 29/16 achievable [1] 111/21 achieve [2] 40/17 50/9 acknowledged [1] 90/20 Acquired [1] 62/7 across [3] 75/23 107/10 107/11 activities [6] 12/14 15/21 15/23 15/24 26/10 82/3 activity [3] 13/21 19/6 45/11</p>	<p>actual [2] 4/20 12/23 actually [28] 4/1 6/5 11/25 14/10 20/11 37/6 39/9 40/5 44/14 46/16 51/25 54/9 56/4 63/19 64/2 66/20 69/17 70/12 79/14 79/22 87/10 94/2 107/21 109/3 109/3 109/10 109/17 115/11 acumen [1] 45/13 ad [1] 95/22 ad hoc [1] 95/22 add [5] 13/2 42/8 54/25 73/13 112/25 added [2] 51/10 63/2 addition [1] 16/16 additional [1] 92/17 additive [1] 34/14 additives [1] 89/13 adequate [1] 18/5 adequately [2] 71/8 71/22 Adjourned [1] 116/6 Adjournment [1] 85/17 administer [1] 3/11 administration [1] 90/12 adopt [1] 91/22 adopted [1] 51/5 advantage [1] 54/25 advantages [1] 51/7 adverse [3] 53/5 68/17 91/10 advertising [1] 38/21 advice [1] 86/10 adviser [3] 6/24 76/5 78/3 affected [1] 115/2 afford [3] 79/11 79/23 79/24 afraid [1] 79/13 after [24] 4/21 8/1 8/3 10/3 20/6 20/6 24/9 24/10 46/2 58/15 58/22 63/11 63/24 68/23 73/9 73/11 73/17 82/16 84/24 85/10 93/20 94/24 105/10 115/3 after 1.00 [1] 84/24 again [16] 5/25 9/3 10/11 25/6 29/6 30/18 45/5 45/11 63/25 84/2 92/10 99/16 100/8 105/12 106/9 110/8 age [5] 19/14 62/4 82/22 100/3 100/4 agent [1] 59/4 agents [3] 77/3 77/13 78/11</p>
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(31) MS SCOTT: - agents

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