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Tuesday, 15 November 2011

(9.30 am)

DR BRIAN McCLELLAND (continued)

Questions by MR MACKENZIE

THE CHAIRMAN: Good morning. Yes, Mr Mackenzie?

MR MACKENZIE: Good morning, sir. We move on to a new topic today, topic C2, which is the non-introduction in Scotland of surrogate testing for non-A non-B Hepatitis, and our witness today is Dr Brian McClelland.

THE CHAIRMAN: Yes.

MR MACKENZIE: Good morning, Dr McClelland.

A. Good morning.

Q. We don't have to look at your CV again but we know that, I think, between 1979 and 2001 you were director of the Edinburgh and Southeast Scotland Blood Transfusion Service. Is that correct?

A. That's correct.

Q. And I think you retired from the SNBTS in 2009.

A. That's correct.

Q. Could we, please, look at your statement you provided on this topic. It's [\[PEN0170754\]](#) and what I would like to do, doctor, is go through your statement and from time to time ask you various questions and also look at some of the documents you have referred to, plus one or two others as well.

1 You say in your statement -- your first heading is
2 "Opinions of the importance of non-A non-B post
3 transfusion hepatitis in the UK between 1980-1989".

4 You say that before considering the particular
5 question we asked you, you thought it may be useful to
6 the Inquiry to provide a personal view on the apparent
7 persistence of the belief over the years 1980 to 1989
8 that non-A non-B post transfusion hepatitis was not an
9 important problem in the UK. And one of the themes
10 underlying this history is the view that was taken of
11 NANBH in the UK from around 1980 to the discovery of
12 Hepatitis C in 1989:

13 "Many of the decisions taken or not taken can only
14 be understood in the context of a widely held view that
15 despite an increasing body of evidence to the contrary,
16 this condition was really transmitted by blood and was
17 usually not particularly serious."

18 You say:

19 "I have tried to assemble some evidence that
20 illustrates how this view may have originated."

21 We will go on to look at the various papers.

22 Am I right in thinking, doctor, that the papers you
23 list are largely looking at the prevalence of
24 post-transfusion hepatitis in the UK rather than
25 focusing on the seriousness of the disease?

1 A. Yes, absolutely.

2 Q. Looking at these papers in turn, please, the first one
3 you refer to is the Medical Research Council blood
4 transfusion research committee in 1974. This is the
5 year of publication of a report of a study carried out
6 for the UK MRC of hepatitis in recipients of blood
7 components.

8 You explain that:

9 "This study is described in some detail since it is
10 one of only four substantial prospective studies of PTHN
11 UK."

12 Can you explain, please, doctor, what does
13 "prospective study" mean and how does that differ
14 perhaps with a predictive study?

15 A. Well, in broad terms, actually the term is quite
16 widely -- it is used in a variety of senses, but in
17 broad terms it implies a study where you, as it were,
18 define the questions that you are asking and then carry
19 out work in advance, according to a planned schedule, to
20 test the answers to those questions.

21 The -- the sort of gold standard -- and we will come
22 back to this I'm sure -- of a presentive study is what's
23 called a prospective randomised clinical trial, which is
24 designed in such a way -- it is designed, if it is well
25 designed, to -- to compare at least two groups of

1 patients, one group who receives a particular form of
2 treatment or intervention, which could be a diagnostic
3 test or anything in principle, and the other group who
4 either is a control group that receives -- does not
5 receive that intervention or treatment or that receives
6 another one, in which case it could be comparing two
7 treatments. Those studies, if properly designed, should
8 see that the groups of patients who are enrolled to the
9 treatment group and the control group, if you like, are
10 randomly selected, and one of the tests that you apply
11 in analysing a study like that is to see that actually
12 the make-up of gender, age, social class, co-morbidities
13 and so on, is very similar between the two groups.
14 There are, you know, a number of very well evolved
15 criteria for -- to determine the quantity of design and
16 execution of the prospective randomised control trial.

17 At a sort of lower -- below the gold standard, if
18 you like, there are studies which set out to look at
19 what happens in the future when you initiate an action
20 in the present, and those are broadly called
21 "prospective studies", but they don't all by any means
22 tick the -- all the boxes required for a very high
23 quality study.

24 Q. Yes, and predictive study, what is that?

25 A. It is not a term I have ever used. I don't really know

1 what it means.

2 Q. I see. We might give it some context if we see it in
3 some of the literature we look at over the course of
4 today. That may help.

5 A. I'm happy to try and do that. I would make the
6 distinction more between a prospective study, which is
7 the sort of characteristics that I have sketched out,
8 and an observational study, which would be essentially
9 looking at what has happened, something that you are
10 already doing and you collect the information about what
11 has been done for a number of years in the past and you
12 then try to draw some inferences about the relationships
13 between one event, for example, the use of a treatment
14 or a test, and another event, which is the development
15 or non-development of an illness in the patient.

16 But those studies are always very difficult to
17 interpret because of the risk of confounding factors,
18 such as associations between a particular type of
19 patient and the probability of getting a particular
20 treatment, and it's extremely difficult, even with the
21 use of quite complicated statistical techniques -- in
22 fact I would say it's impossible -- to draw conclusions
23 about the cause and effect from these retrospective type
24 of studies.

25 Q. Yes.

1 A. But they are very useful for generating hypotheses, for
2 saying it looks as though something is happening because
3 of something else, then you go on to do a properly
4 designed prospective study to test that hypothesis.

5 Q. Yes. I understand.

6 Returning, please, to your statement and the MRC
7 study, you explain that:

8 "From mid 1969 to the end of December 1971, patients
9 at the Central Middlesex Hospital ..."

10 Participated in giving a pre-transfusion blood
11 sample for ALT and viral studies.

12 We see that of the 2,184 patients who were
13 transfused during the study period, follow-up was
14 completed on 768 who received an average of 3.7 units of
15 blood per patient.

16 Over the page of your statement, we see:

17 "Routine testing of donor blood for Hepatitis B only
18 began during the last five months of the study period:

19 "Raised ALT values were found after transfusion in
20 158 patients."

21 Six of whom underwent liver biopsy:

22 "None showed histological features typical of acute
23 viral hepatitis."

24 Then you quote:

25 "The authors stated that these 158 patients were

1 investigated for conditions other than viral hepatitis,
2 eg drug induced liver injury. It was arbitrarily
3 decided that where such other potential causes existed,
4 the patient would not be regarded as suffering from
5 viral hepatitis. On this basis, eight patients
6 (1 per cent) were judged to have had post-transfusion
7 hepatitis. Sustained elevation of ALT without other
8 clinical features of hepatitis was present in 35
9 patients."

10 You then again quote:

11 "The authors concluded that 'the overall incidence
12 of icteric and anicteric hepatitis in the present survey
13 (1 per cent) is low compared with the incidence found in
14 prospective studies in Japan (65 per cent) ... USA
15 (18 per cent) ... and Germany (14 per cent).' However
16 if PTH had been defined to include all the patients with
17 ..."

18 That's the end of quote and you go on to say:

19 "However, if PTH had been defined to include all the
20 patients with persistently elevated ALT, the PTH rate
21 would have been 35/768 or 4.5 per cent. If PTH had been
22 defined to include patients with any elevation of ALT
23 following transfusion, 158 of the 768 patients
24 (21 per cent) would have been defined as having PTH."

25 That paragraph perhaps just illustrates the

1 difficulties at the time, doctor, in trying to
2 accurately conclude the true rate of post-transfusion
3 hepatitis based on elevated ALT levels.

4 A. Absolutely.

5 Q. We will come back to the problem of surrogate tests
6 shortly.

7 You say:

8 "Although this study preceded the description of
9 NANB hepatitis, it was later cited as making it
10 unnecessary to conduct a further prospective controlled
11 investigation of the impact of surrogate testing for
12 NANBH."

13 We should perhaps briefly look at the paper. It's
14 [\[LIT0010116\]](#).

15 If we can go over the page, please, at page 174,
16 about two-thirds of the way down we can see, the objects
17 of the survey were:

18 "1. To obtain information about the incidence of
19 icteric and anicteric post-transfusion hepatitis:

20 "2. To establish the frequency of Hepatitis B
21 antigen and the corresponding antibody in blood donors
22 and patients and to try to correlate their presence with
23 blood transfusion and its implications:

24 "3. To determine the frequency of Epstein-Barr
25 virus and cytomegalovirus by blood transfusion and their

1 role in causing post-transfusion liver damage."

2 We can see no reference there and I think indeed in
3 this paper to non-A non-B Hepatitis. Is that correct?

4 A. Yes.

5 Q. And that's perhaps not entirely surprising, given,
6 I think, the Prince paper, which mentioned non-A non-B
7 was published in 1974, I think?

8 A. Yes, and this study was obviously conceived considerably
9 before the publication date of 1974. I think it was the
10 first enrollments were 1969 so as an early study.

11 Q. And indeed for much of the period, at least for the
12 initial period of the study, there wasn't even testing
13 for Hepatitis B in place.

14 A. Correct.

15 Q. So that was perhaps another confounding factor. I think
16 it's also of interest to look at page 180, please.

17 Before I do that, I should go back two pages to
18 page 178. We can see under "hepatitis patients" the
19 results of this study, and essentially it's as per the
20 quote in your statement, the 158 patients developed
21 raised serum ALT values after transfusion, and it was
22 arbitrarily decided that where such other potential
23 causes existed, the patient would not be regarded as
24 suffering from viral hepatitis and hepatitis either
25 icteric or anicteric was judged to be problem in eight

1 patients, 1 per cent.

2 If we go to page 180, please, I think we can see
3 some of the difficulties here in trying to rely on
4 elevated ALT as a marker for post-transfusion hepatitis,
5 and that in this passage headed "Other patients showing
6 ALT rises", the authors state:

7 "The residual 115 patients who showed ALT rises
8 after transfusion were thought not to have viral
9 hepatitis, although liver biopsies showed features akin
10 to hepatitis in five of these. Halothane was accepted
11 as the cause in these five cases."

12 What's Halothane?

13 A. Halothane was a very widely used general anaesthetic at
14 that time, which was known to be quite toxic to the
15 liver. And I certainly recall slightly later -- well,
16 no, around about this period in fact, because I was then
17 working in the field of gastroenterology, not blood
18 transfusion, and we barely recall, you know, seeing
19 a significant number of patients who had elevations of
20 liver enzymes following surgery, and one of the -- one
21 of the interpretations, and it was a thing that was
22 discussed widely actually at that time, the early 1970s,
23 was what proportion of these were due to Halothane.

24 Q. Then returning to the paper, the next paper "Drugs or
25 alcohol were accepted as the cause of ALT rises in nine

1 patients."

2 Again, presumably drugs or alcohol can cause
3 elevated ALT. It was known at the time, obviously.

4 A. Yes, essentially the ALT, that is protein released from
5 liver cells, when they are damaged, by anything.

6 Q. Returning to the paper, the authors state:

7 "Acceptable reasons for ALT rises were present in 27
8 patients ..."

9 Et cetera.

10 Then:

11 "50 patients showed ALT rises two weeks after
12 transfusion. In many, the value had returned to normal
13 a week later ..."

14 Et cetera.

15 Then:

16 "All but five of these patients had been recently
17 operated upon and the ALT rises may have been the
18 non-specific effect of the surgical procedure."

19 So is that another possible cause for elevated ALT?

20 A. It's well -- there are numerous observations that just
21 coming into hospital increases an individual's risk of
22 having ALT elevations. Having surgery, which always
23 involves having multiple drug, anaesthetic agents,
24 et cetera, also increases the risk of having elevated
25 ALT. It's a very non-specific marker.

1 Q. In the final paragraph there:

2 "The remaining 21 ALT rises occurred at longer
3 intervals after transfusion; these too had returned to
4 normal again within one week."

5 The point in short, doctor, looking in that, is it
6 perhaps illustrates the difficulties of using ALT as an
7 indicator for post-transfusion hepatitis and also
8 perhaps illustrates the difficulties in relying on this
9 paper as an accurate estimate of the prevalence of PTH
10 in the UK at that time. Does that seem reasonable?

11 A. It was the latter point really was the one that -- was
12 why I chose to cite it, because it was the only study
13 for a long time and it was used -- and I think possibly
14 slightly misused -- the interpretation of the data was
15 used to say the incidence of non-A non-B Hepatitis is
16 very low, and I think that went -- that's not actually
17 consistent with possible interpretations of the results
18 in this paper.

19 Q. Yes. You, of course, in paragraph 1.4 of your statement
20 refer to the different ways in which the data can be
21 interpreted.

22 A. Yes.

23 Q. Moving on, please, to the next paragraph in your
24 statement, paragraph 1.6, you refer to another study by
25 Collins and others reported in 1983, and we will come to

1 the paper shortly, but you explain:

2 "In 1983 a UK study of 248 transfused cardiac
3 surgery patients reported that 38 of the 248 patients
4 (15.3 per cent) had some elevation of ALT during the
5 five at the 30 days following the operation.

6 "Increase a transaminase levels was unexplained and
7 reached over 100 international units per millilitre in
8 six patient, all of whom had normal liver function tests
9 when retested at six months. One patient had evidence
10 of chronic persistent hepatitis six months after surgery
11 and transfusion."

12 And the authors stated, and you quote:

13 "We conclude that non-A non-B Hepatitis after blood
14 transfusion from a largely by British blood donor group
15 probably leads to clinically significant chronic liver
16 disease very rarely indeed."

17 If can we go to the paper, please, it's
18 [\[LIT0010212\]](#). We can see from the abstract, I think,
19 picking up in the third sentence:

20 "During five to 30 days after operation 38 of the
21 patients showed an increase in serum transaminase
22 activities. There was no serological evidence for fresh
23 infection by Hepatitis A or B virus cytomegalovirus,
24 Epstein-Barr virus or herpes virus in any of these
25 patients. The increase in transaminase activities was

1 unexplained and reached over 100 IU against a normal of
2 less than 40 IU in six patients. The incidence of acute
3 short incubation post transfusion non-A non-B Hepatitis
4 was therefore thought to be 2.4 per cent. These six
5 patients had normal liver function six months after
6 transfusion but a further two of the surviving 228
7 patients had raised serum transaminase activities at six
8 months. In one of these, liver biopsy disclosed chronic
9 persistent hepatitis; in the other, alcoholic liver
10 disease was suspected. The incidence of significant
11 chronic liver disease after blood transfusion possibly
12 attributable to a non-A non-B Hepatitis agent was
13 therefore only 0.4 per cent."

14 I think that percentage is one from 248, which
15 presumably is the patient in which liver biopsy
16 disclosed chronic persistent hepatitis.

17 So that's that paper and returning to your
18 statement, please.

19 THE CHAIRMAN: You might think that at least one of the
20 contributors to the paper may have changed his mind over
21 time, doctor?

22 A. All I would say is that the interpretation of the
23 observations in that study was entirely consistent,
24 I think, with the understanding of this condition at the
25 time. In the preliminary report there are very useful

1 excerpts from Professor Sheila Sherlock's book,
2 Dame Sheila Sherlock's book, which was the sort of
3 British bible of hepatology, and I haven't actually
4 checked them up but I'm sure that the interpretation
5 placed on the Newcastle study findings, which you have
6 just gone through, would have been entirely consistent
7 with the received knowledge and beliefs about non-A
8 non-B Hepatitis, if it had been invented by then, about
9 the six of ALT liver enzyme elevations after surgery and
10 so on. I think the interpretation is not open really to
11 challenge.

12 THE CHAIRMAN: Yes.

13 A. It was the forward projection of these interpretations
14 that I was concerned about.

15 MR MACKENZIE: And what do you mean by that?

16 A. Well, the fact there were -- and the others, we will
17 come back to this, but these are studies which were
18 interpreted at the time very reasonably, the findings
19 were interpreted very reasonably as saying non-A non-B
20 Hepatitis following transfusion isn't a problem, and
21 that belief tended to persist despite the fact that more
22 evidence was emerging that it probably was a problem.
23 That's all I'm trying to say.

24 Q. I suppose when you say it's not a problem, there may be
25 two elements to that, firstly, prevalence and, secondly,

1 seriousness of the disease?

2 A. Yes.

3 Q. Yes. Returning to your statement, please, the top of
4 page 3, paragraph 1.7, you refer to a report by
5 Vandervelde and Mortimer, I think of the Public Health
6 Laboratory Service in England, and you say that:

7 "At the meeting of the BTS directors working party
8 and transfusion-associated hepatitis on 24 November 1986
9 a report was presented by two workers from the PHLS on
10 an epidemiological study of non-A non-B Hepatitis in the
11 UK. This extract gives a rather vivid view of the
12 confusion surrounding non-A non-B Hepatitis and its
13 relationship to blood. As late as the end of 1986
14 a doctor ..."

15 In paragraph 1.8 you give a quote from that paper
16 but I wonder whether we have to be a little cautious
17 with this paper, because if we can go to it, please,
18 it's [\[PEN0171531\]](#). We can see, top right-hand corner
19 "Not to be published", and we see the handwriting:

20 "Presented to UK working party on
21 transfusion-associated hepatitis on 24 November 1986".

22 Is that your writing doctor?

23 A. Yes.

24 Q. Would you have written that at the time or more
25 recently?

1 A. It's probably at the time, because when I have annotated
2 anything since the beginning preparations for the
3 Inquiry, I have dated the annotations just to make
4 a clear distinction.

5 Q. Do you have any recollection of that paper being
6 presented to or discussed at this working party meeting?

7 A. I don't remember. I have a vague recollection of the
8 discussing the study with, it was Dr Janet Mortimer, not
9 Philip Mortimer. When it was being done. I don't
10 recall the meeting when it was presented but my habit
11 was to, you know, if it wasn't indicated, to write on
12 a paper that was discussed at a meeting. So I think it
13 must have been discussed and I must have been there.
14 I don't remember.

15 Q. I can quite understand the paper was presented at that
16 meeting, but I wonder whether it was drafted much
17 earlier than that.

18 If we look at paragraph 2, we see:

19 "The study ran from September 1978 to
20 December 1980."

21 So one would have thought the authors would write
22 the paper shortly after the study had ended.

23 A. I would think so, yeah.

24 Q. If we go to the second last page, please, and look at
25 the references, we have a quick look through the

1 references, I think we will see the latest reference is
2 1981, which I wonder, is that another perhaps clue or
3 indicator that the paper is likely to have been drafted
4 perhaps in late 1981 or early 1982, possibly?

5 A. That's entirely possible. I have no knowledge now of
6 that. I included it because it was obviously felt we
7 were presenting this information to that working party
8 in 1986. It was another -- it's an example of the fact
9 that there was still a lot of diverging thoughts and
10 opinions about the main origin of non-A non-B Hepatitis.
11 That was the only reason for including it.

12 Q. It's also perhaps -- well, am I right in thinking that
13 we should at least be cautious as to when it was
14 drafted, in that it appears as though it was drafted
15 about 1981?

16 A. That's a perfectly reasonable deduction.

17 Q. Yes, albeit it was presented to the November 1986
18 meeting. And I think as well, it's not a paper
19 restricted to post-transfusion hepatitis; rather it's
20 hepatitis in the community more generally, I think. Is
21 that right?

22 A. Absolutely. Oh yes, absolutely.

23 Q. So put that paper to one side, please, and return to
24 your statement.

25 Paragraph 1.9 you then refer to -- this is the

1 fourth of the four papers, you mentioned a paper by
2 Contreras and others published in 1991. The full title
3 is "Low incidence of non-A non-B PTH in London confirmed
4 by Hepatitis C serology."

5 So this papers, I think, comes out after the
6 Hepatitis C test is available and in use. Just for
7 completeness the reference is [\[LIT0010318\]](#).

8 I won't go to it, doctor, but I think you say you
9 set out in your statement the relevant parts of the
10 paper.

11 You say:

12 "A prospective was carried out by the North London
13 Blood Transfusion Service, enrolling patients over the
14 period July 1986 to July 1989. The authors noted that
15 'London has the highest incidence of infectious markers
16 in the donor population in the UK: the rules of this
17 study would therefore represent the worst case'."

18 The report covered 387 surgical patients:

19 "... who received 1,176 blood components from a mean
20 of three donors. Regular blood samples were obtained
21 from the blood recipients over a period of six months
22 with a final sample at 12 months. Three patients had
23 increased ALT levels 'consistent with post-transfusion
24 NANBH'. One patient had clear evidence of transmission
25 of Hepatitis C. One of the eight blood donations

1 received by this patient was also Hepatitis C-positive.
2 The ALT level in this donation was normal but anti-HBc
3 was present. The report presents no data on routine
4 surrogate tests on the donations but it would appear
5 from the evidence present that the single episode of
6 Hepatitis C transmission would not have been avoided as
7 a result of ALT screening but would have been avoided by
8 screening for able-HBc."

9 You can quote from the authors in relation to
10 Hepatitis C.

11 That paper is perhaps a little after our period,
12 doctor, which I think is more really the 1980s up until
13 roughly 1989 perhaps. Whereas this paper isn't,
14 I think, published until at least 1991 and has the added
15 benefit of being able to use Hepatitis C tests at that
16 stage.

17 A. Yes, I included it because the enrollment was within the
18 sort of period which I think is relevant, and it is one
19 of the very few studies that had -- could have had the
20 potential to give us some of the information that we
21 needed, but it was a prospective study.

22 Q. And, of course, an important point to note, I think, in
23 these papers is that recipients of blood donations were
24 followed up in the studies, whereas when we come in due
25 course to look at the UK multi-centre study on surrogate

1 testing, that was restricted to donors.

2 A. Exactly, yes.

3 Q. We will come on to all of that.

4 Then we are now at page 4 of your statement, please.
5 In paragraph 1.10 you refer to an abstract you submitted
6 for the 18th Congress of the International Society of
7 Blood Transfusion in 1984 indicates that you also were
8 of the view that:

9 "'Clinically apparent NANB post-transfusion
10 hepatitis was also a small problem' that the importance
11 of elevated liver enzymes as an indicator of NANB PTH
12 was uncertain and that for the recipient of blood or
13 single donor components the benefits of improved donor
14 testing were not quantifiable."

15 Could we perhaps briefly look at that? It's
16 [\[SNB0086696\]](#).

17 Over the page, please. It's a little hard to read.
18 It's very small writing. I'm sure we can blow it up.

19 In the first paragraph I think we can see you
20 stated:

21 "In a non-remunerated donor system which employs
22 third generation Hepatitis B tests, Hepatitis B
23 following transfusion of fresh single donor blood and
24 blood components is extremely rare. Clinically apparent
25 non-A non-B post-transfusion hepatitis is also a small

1 problem. Although a few transfused patients develop
2 asymptomatic elevations of liver enzymes the importance
3 of this remains undefined. Thus for the reflect of
4 blood or single donor component, the benefits of
5 improved donor testing are not quantifiable."

6 When you stated, doctor, that "clinically apparent
7 non-A non-B post-transfusion hepatitis is also a small
8 problem," did you mean "problem" in the sense of low
9 prevalent, not serious, or both?

10 A. I'm sure what -- I mean, I honestly can't remember, and
11 unfortunately I haven't -- I didn't retain either the
12 slide or any speaking notes of this talk, so I don't
13 know what I actually said. But what I undoubtedly meant
14 then was that there were very few reported cases and --
15 of jaundice, you know, the disease hepatitis presenting
16 clinically as a result of non-A non-B hepatitis
17 presented clinically following transfusion, and that was
18 precisely the experience, of course, of Dr -- in
19 Dr Dow's study that we found, I think; 20 cases of
20 something over eight years that were actually reported
21 as clinical non-A non-B Hepatitis.

22 So I think the statement remains correct. At the
23 time, the statement about the significance of
24 asymptomatic elevations of liver enzymes was still at
25 that time, I think, probably fairly accurate in saying

1 it was still uncertain, undefined.

2 Q. Thank you. Now, returning to your statement, please, in
3 paragraph 1.11 you summarise that:

4 "The authors of clinical studies mentioned above
5 seem generally to have considered that the 0.4 per cent
6 to 1.0 per cent incidence of post-transfusion hepatitis
7 that they reported in the UK was very low in comparison
8 to rates reported from other countries. It is also
9 likely that because there are many causes of elevated
10 liver enzymes (ALT), some cases that were in fact due to
11 infectious hepatitis could be explained by evidence of
12 another cause such as alcohol intake. The PHLS
13 study..."

14 Which is the 1986 paper which I cautioned about:

15 "... illustrates how at least in some circles there
16 was a view that non-A non-B hepatitis was rarely
17 transmitted by the parenteral route."

18 Was that a view you would have held in 1986?

19 A. No.

20 Q. We have perhaps also to take into account in that regard
21 that the reports from really, I think, starting in 1982
22 but then perhaps published in 1983/1984 that almost all
23 haemophilia patients who received Factor VIII
24 concentrates for the first time developed NANBH
25 regardless of whether the concentrates were commercial

1 or voluntary NHS concentrates. So, again, that
2 presumably would be fairly convincing evidence that
3 NANBH was transmitted by the parenteral route.

4 A. Yes.

5 Q. To pause at this stage, we have looked a little at the
6 studies into the prevalence of NANBH in the UK. Could
7 we perhaps look at some of the literature regarding the
8 seriousness of this disease? Before I do that, could
9 you perhaps indicate just in general terms your
10 understanding of how serious NANBH was regarded in the
11 1980s, perhaps starting at the beginning, taking us to
12 the middle and then taking us to the end of that decade,
13 just in general terms?

14 A. That's a very difficult question to answer in any useful
15 way. I think all that I could say was that over that
16 period, from the beginning of the 1980s to the end of
17 the 1980s, you know, I would have been aware of
18 a growing body of evidence that in some cases the
19 disease characterised by transient and fluctuating
20 elevations of liver enzymes could in some cases progress
21 to serious and possibly life-threatening liver disease.
22 I think over that decade very far and away the bulk of
23 that understanding would have been derived from what was
24 happening in the haemophilia community, which were the
25 most -- obviously the most intensively exposed, we now

1 know in retrospective would have been at high risk of
2 being exposed to several different genotypes of the
3 virus and, therefore, would be the group in whom severe
4 liver disease would I think -- common sense would have
5 told one of that the group that was most likely to
6 develop severe liver disease.

7 I honestly cannot recall whether in that decade
8 I was aware of severe progressive liver disease leading
9 to cirrhosis occurring in recipients of blood components
10 derived from, you know, small or relatively small number
11 of individual donors.

12 Q. Thank you. I think what I would like to do now, doctor,
13 is to turn to some of the particular items of literature
14 and see if they generally represent what would have been
15 the understanding at the time, and you have mention
16 Dame Sherlock's book. We should perhaps start with
17 that, the 1981 edition. It's [\[LIT0012431\]](#).

18 This is chapter 9 of your preliminary report, which
19 contain as extract, in particular it's at page 2453.

20 THE CHAIRMAN: Which edition is this, Mr Mackenzie?

21 MR MACKENZIE: This is the 1981, sixth edition.

22 In paragraph 6.110 there is a reference to
23 Professor Sherlock's book, and the end of this paragraph
24 states:

25 "In terms of the clinical course of the disease it

1 indicated that a mild chronic hepatitis develops in
2 about a quarter of patients but this usually improved
3 with time although cirrhosis could develop."

4 Then over the page to the next paragraph, please,
5 paragraph 4.114, the final quote where
6 Professor Sherlock stated:

7 "Non-A non-B Hepatitis often progresses to a mild
8 chronic hepatitis. The prognosis of this is, at the
9 moment, uncertain but probably benign."

10 Then the next publication, please, is
11 Professor Mollison's book in 1983, the seventh edition,
12 and it's [\[PEN0171734\]](#).

13 Doctor, was this the standard textbook on blood
14 transfusion in the UK at the time?

15 A. Yes.

16 Q. Were there any other textbooks on blood transfusion at
17 the time?

18 A. Sorry, what date was this?

19 Q. This is a January 1983, seventh edition.

20 A. There certainly wasn't another major textbook, UK
21 textbook in 1983 that I can recall.

22 Q. Yes. Then over the page, please. The author states
23 under "Non-A non-B Hepatitis":

24 "This rather clumsy term is used to describe
25 hepatitis in which both HAV and HBV have been excluded.

1 The term Hepatitis C is not used because there is
2 evidence that there is more than one kind of non-A non-B
3 virus and because no specific tests have yet been
4 developed. The mode of transmission of non-A non-B
5 Hepatitis may sometimes be similar to that of
6 Hepatitis B. Non-A non-B Hepatitis is prevalent
7 following transfusion or other percutaneous exposure; it
8 is commoner in populations of low socio-economic status
9 and is probably spread by close person to person
10 contact; it is associated with a chronic carrier state."

11 What was meant by that, a chronic carrier state?

12 A. I think that would have been considered to be an analogy
13 with the -- what happens, for example, with Hepatitis B,
14 which is that some patients who become infected with the
15 virus continue to have the virus in their blood for long
16 periods. Even though their body may make some form of
17 immune response, that does not successfully remove the
18 virus from the blood, so there is a risk that the blood
19 may be infectious, even during a period when the
20 individual is showing no clinical signs or symptoms of
21 the disease associated with that virus.

22 Q. Thank you. Returning to the passage:

23 "Non-A non-B PTH has a slightly shorter incubation
24 period than Hepatitis B, ie between six and ten weeks
25 with a peak of about eight weeks ... As a rule non-A

1 non-B Hepatitis is symptomatically mild. Patients
2 seldom need to be admitted to hospital, nevertheless up
3 to 60 per cent of cases have abnormal alanine
4 aminotransferase (ALT) (previously called SGPT) levels
5 for more than one year. If a liver biopsy is taken,
6 most of the cases show histological evidence of
7 a significant chronic liver disease and approximately
8 10 per cent show features of cirrhosis (Alter, 1980).
9 A striking feature in non-A non-B Hepatitis is the
10 tendency for serum hepatic enzyme levels to fluctuate
11 markedly over a relatively short time. Although typical
12 non-A non-B Hepatitis differs in several respects from
13 typical B hepatitis, there is a substantial overlap and
14 the two forms cannot be differentiated solely on
15 clinical grounds."

16 A reference -- the paragraph at the bottom of the
17 page -- to the Aach study in 1981, which I'll come back
18 to your statement in due course, about the possible use
19 of ALT as a surrogate test for screening donors for
20 non-A non-B Hepatitis.

21 Then over the page, please, at page 774, under
22 "Frequency of post-transfusion hepatitis", the author
23 states:

24 "Anicteric cases of PTH are commoner than icteric
25 cases."

1 Does that mean in short, doctor, that jaundice is
2 unlikely in post-transfusion hepatitis cases, as at this
3 time, anyway?

4 A. I think the majority of cases did not go yellow.

5 Q. Yes:

6 "For example, in a study reported from the USA in
7 which 2,204 patients were followed and in which PTH was
8 diagnosed in 241 patients, the disease was icteric in
9 less than one-fifth of the cases. It follows that
10 repeated sampling of recipients is necessary if all
11 cases are to be detected and that only prospective
12 studies are likely to give a true indication of the
13 frequency of PTH."

14 A reference to studies reviewed in America, I think.
15 The final paragraph:

16 "In the UK no prospective survey, carried out
17 exclusively with HBsAg negative blood has been reported.
18 Nevertheless there is evidence that non-A non-B viruses
19 play a smaller part in the UK in the USA."

20 Et cetera.

21 There is a reference to Dane personal communication.
22 Who is Dr Dane?

23 A. Dr David Dane was virologist of the Middlesex
24 Hospital -- I can't tell you exactly what dates -- but
25 he was eminent -- the research for which he was most

1 famous in relation to Hepatitis B, and he actually
2 discovered -- he was one of the first people to
3 visualise the virus in the blood by electronmicroscopy,
4 and that observation led it to being called the Dane
5 article. He was a mentor of virological testing group,
6 which one of his students was Dr Richard Tedder, whose
7 name has featured quite prominently in the Inquiry.

8 Q. Just looking at the passages we have read from
9 Mr Mollison's publication in 1983, do these passages
10 reasonably set out what would have been the knowledge of
11 a transfusionist about non-A non-B post-transfusion
12 hepatitis at the time?

13 A. I think very reasonably, yes. And this is what most
14 people would have read.

15 Q. Now, the next publication, please, may we go to is over
16 to America, Harvey Alter in 1985. It's [\[LIT0010811\]](#).

17 This is a chapter in a textbook, I think,
18 "Post-transfusion hepatitis clinical features, risk and
19 donor testing". Really again just sticking at the
20 passages, looking at the state of knowledge after the
21 seriousness of the disease, if we go to page 49, please,
22 it's 0813 -- and under "NANB clinical significance" --
23 I won't read out what's stated but I think much of
24 what's set out chimes with what Mollison had set out.

25 The top of the next page, please, we see in the

1 second line:

2 "Very characteristic of NANB is the fact that these
3 ALT elevation tend to fluctuate considerably."

4 Then the paragraph beginning:

5 "Because of the asymptomatic nature of chronic NANB
6 hepatitis, the clinical significance of chronic ALT
7 elevations in these patients has been questioned.
8 Although NANB hepatitis is indeed generally a clinically
9 benign disease, there is accumulating evidence that some
10 cases progress to severe chronic liver disease."

11 There is then reference to various studies, which
12 I won't read out, but over the page, please, page 51,
13 about ten lines down, there is reference to the reality
14 study in Italy, reported in 1982, and then Alter picks
15 up an composite of existing data:

16 "... suggest that at least 10 per cent of patient
17 that develop chronic ALT elevations following acute PTH
18 will progress to cirrhosis. However, this estimate
19 is based on a very small sampling of biopsied blood
20 recipients and must be reaffirmed by continuous
21 prospective follow-up of patients developed chronic
22 hepatitis following blood transfusion. If these
23 findings are validated, then the clinical implications
24 of NANB are somewhat greater than previously
25 anticipated."

1 A. May I just say, though, that I think there is -- buried
2 in the first paragraph there is a very important line:
3 "... since the selection of patients for biopsy is
4 not random but skewed to those with the most severe
5 biochemical or clinical abnormal amounts."
6 So any study -- liver biopsy is not a benign
7 procedure.
8 If you think about it nor for a moment, having a
9 large needle stuck into your liver is not pleasant and
10 not entirely safe. Particularly at this time was not
11 entirely safe. So it would be ethical to restrict the
12 procedure only to patients in whom there was really
13 material other evidence that their disease was actually
14 quite severe.
15 So any study that's based -- any inferences drawn
16 from liver biopsy studies includes a very large element
17 of bias. And the preliminary report it does mention
18 some very important population-based studies in which
19 actually looking at large options of patients who have
20 been exposed to non-A non-B Hepatitis over very long
21 periods, one gets a very different picture of the
22 severity of the disease. So the element of selection
23 I think one should never forget.
24 Q. I understand that, doctor, although I suppose at least
25 for that category of patients who had the most severe

1 biochemical or clinical abnormalities, the biopsy
2 results were beginning to suggest that NANBH may be
3 a more serious disease than previously thought?

4 A. Absolutely.

5 Q. But the question perhaps was whether those biopsy
6 results were truly representative of all patients who
7 suffered continuing elevated, fluctuating ALT levels.

8 A. Yes, exactly.

9 Q. Yes. The next item of literature please, again,
10 sticking with Alter but one year later, 1986, is
11 [\[LIT0011675\]](#).

12 This is a publication by Dienstag and Alter, non-A
13 non-B Hepatitis, involving epidemiologic and clinical
14 perspective", published in 1986 in "Seminars on liver
15 disease".

16 If we could go to page 71, which is 1679, the
17 right-hand column under "Chronic NANB hepatitis",
18 I wonder whether we see a slight hardening in the view
19 of Alter. He states:

20 "In the decade since its discovery the concept of
21 NANB hepatitis has evolved from that of a benign
22 elevation of aminotransferase activity to that of
23 a serious disease with significant long-term
24 consequences. The longer patients are followed the more
25 obvious it becomes that CAH ..."

1 Is that chronic active hepatitis?

2 A. Yes.

3 Q. "... and cirrhosis are a very real part of the natural
4 history of NANB hepatitis."

5 Over to page 72, please. In the left-hand column,
6 about half way down, after considering the various
7 studies of biopsies, the authors stated:

8 "These studies demonstrate that the histologic
9 pattern in patients with non-A non-B Hepatitis who are
10 selected by biopsy ..."

11 That's the point you made:

12 "... connotes a more serious outcome than is
13 suggested by either the amplitude of the ALT elevations
14 or the severity of symptoms. Note has been made of the
15 fact that generally the CAH and NANB hepatitis is not
16 extensive and that the diagnosis is subject to the
17 variability of histologic interpretation. Nonetheless,
18 the diagnosis of cirrhosis is histologically unequivocal
19 and the frequency with which it occurs suggests that the
20 CAH observed is not a benign or static lesion; indeed it
21 can progress to cirrhosis in a substantial proportion of
22 case. Such progression has been well documented by
23 serial liver biopsies."

24 Then towards the bottom of the left-hand column it's
25 stated:

1 "Progression to severe symptomatology may be very
2 protracted taking 14 to 18 years in two patients
3 analysed retrospectively in the NIH series because the
4 maximum prospective evaluation time for chronic non-A
5 non-B Hepatitis is now only ten years. We may find
6 increasing non-A non-B Hepatitis related morbidity and
7 mortality occurring in the patient population over the
8 next decade and beyond."

9 Then sticking with the right-hand column, towards
10 the bottom, commencing:

11 "Thus one decade ..."

12 The authors make various predictions based on the
13 evidence available.

14 At the end of that paragraph they say:

15 "The accuracy of such a prediction remains to be
16 substantiated. Prospective evaluation of newly
17 developing NANB hepatitis cases and continued long-term
18 follow-up of existing cases is essential to define more
19 precisely the chronic consequences of NANB hepatitis."

20 I think I'll leave that paper there, please, and
21 then come back to Britain and to Professor Mollison
22 again. This is in his eighth edition textbook in 1987,
23 which we find in the preliminary report. It's
24 [\[LIT0012543\]](#).

25 We see that paragraph 9.40 of the preliminary

1 report:

2 "In 1987 the eighth edition of the standard UK
3 textbook on blood transfusion was published ..."

4 By Professor Mollison.

5 Then over the page, please, paragraph 9.41. We can
6 see the quote at the top of the page. The quote was
7 that:

8 "NANB PTH is usually mild and asymptomatic during
9 the acute phase ... However, prospective studies in the
10 USA have shown that the chronic sequelae of NANB PTH may
11 be serious. Over 50 per cent of patients develop
12 chronic hepatitis as judged by persisting or fluctuating
13 rises in ALT levels lasting for at least one year after
14 onset of the disease and in most for more than three
15 years ... although the chronic phase of NANB PTH, like
16 the acute phase, tends to be mild, some patients develop
17 severe chronic liver disease and 10 per cent of these
18 patients progress to cirrhosis, which is generally
19 milder than alcoholic cirrhosis."

20 In the next paragraph:

21 "It was noted that the available data was based on
22 biopsy in very small numbers of patients."

23 Finally, just to complete the decade, if we can go
24 back to Professor Sherlock please. This is at
25 paragraph 9.104 of the preliminary report. It's

1 [\[LIT0012570\]](#). This is the seventh edition of
2 Professor Sherlock's textbook, published in 1989.

3 We can see the quote:

4 "The causative agent of NANBH has not hitherto been
5 identified, although a viral genomic clone has been
6 isolated from infected plasma and liver ..."

7 That's perhaps a reference to the Chiron discovery,
8 I think, which we will hear about in the next topic.

9 The next paragraph, 9.105:

10 "As regards the clinical picture of the disease they
11 quote that 60 per cent of patients will have raised
12 serum transaminase one year later and 68 per cent of the
13 disease becomes chronic and in 20 per cent cirrhosis
14 develops. Hepatocellular carcinoma is a rare
15 complication."

16 Then later the authors stated:

17 "Prognosis is very variable. In some the diseases
18 are benign with spontaneous biochemical improvement over
19 one to three years. In other chronic active hepatitis
20 can convert to more serious disease and even go on to
21 cirrhosis. In general, however, in spite of biochemical
22 disease the patient is asymptomatic and the development
23 of hepatic failure is rare. Hepatocellular cancer has
24 been recorded but is exceedingly rare."

25 Doctor, that completes my review of the literature.

1 Do you think that's a reasonable portrayal of the state
2 of knowledge of the seriousness of non-A non-B Hepatitis
3 in the 80s?

4 A. I think that's very fair.

5 Q. Thank you. Returning to your statement, please, we are
6 about to go back to America and their studies into
7 surrogate testing. I think we had reached page 4 and
8 your subheading "Surrogate testing as a means of
9 reducing the risk of transfusion transmitted hepatitis".

10 You explain that:

11 "Much of the early information comes from the
12 United States, whereby as early as the 1940 it was
13 recognised that patients often developed jaundice after
14 blood transfusion."

15 You explain what jaundice is, that it's
16 a manifestation of liver disease:

17 "A subset of liver disease, hepatitis, is
18 inflammation of the liver. It may occur with or without
19 jaundice."

20 In paragraph 2.2:

21 "Understanding of hepatitis grew as better tests
22 were developed ... In 1955 tests were introduced that
23 detected raised levels of enzymes in the blood that are
24 released from liver cells. There are many causes of
25 increased levels of liver enzymes in the blood; they

1 include damage to liver cells caused by, eg alcohol,
2 drugs, including some anaesthetics and antibiotics in
3 association with obesity or as a result of an
4 infection."

5 I think some of the other causes we looked at in the
6 MRC study report.

7 Over the page, please, paragraph 2.3 you explain
8 that:

9 "A commonly used liver function test is based on
10 measurement of the concentration of the ALT which is
11 present in normal liver cells and is released when liver
12 cells are damaged. It is important to say that tests
13 like ALT were developed to help diagnosis of patients.
14 They were not developed for screening populations of
15 healthy individuals."

16 Paragraph 2.4, we can see what you say there.

17 Paragraph 2.5 you explain:

18 "The term surrogate has come to be used in the
19 context of NANB PTH to denote a test that may be applied
20 to blood donors or donations and that detects a property
21 that indicates the presence of some form of
22 transmissible hepatitis, presumed to be due to the
23 transfer of an infectious agent."

24 In the next paragraph you explain:

25 "In the United States, the transfusion-transmitted

1 viruses (TTV) study was started in 1974 and collected
2 samples from transfused patients and from blood donors
3 up to 1979. An interim report in 1978 indicated that
4 transfusion hepatitis (diagnosed by the presence of
5 elevated ALT levels) occurred in 12.6 per cent of
6 transfused patients and 2.6 per cent of control
7 non-transfused hospital patients. Of the patients who
8 received only volunteer donor blood, 7.5 per cent
9 developed PTH, whereas 43 per cent of those who received
10 only paid donor blood developed PTH."

11 You go on to say:

12 "Analysis of information about the donors' blood
13 revealed that the risk of PTH in the recipient was
14 associated with the level of ALT in the donated blood.
15 Where the donor ALT was normal, the attack infection
16 rate for PTH was 3.4 per cent. Where the ALT level in
17 the blood was elevated, the infection rate was
18 43.3 per cent."

19 We should perhaps pause briefly to look at this 1978
20 report. It's [\[PEN0170870\]](#). I think it's set out in
21 the first page, the objectives of the study. There were
22 four in total.

23 Firstly:

24 "To determine in a prospective fashion the incidence
25 and aetiologies of transfusion associated hepatitis at

1 different medical centres and relate these to different
2 blood donor populations."

3 Secondly, we can see for ourselves.

4 Thirdly:

5 "To establish a bank of well pedigreed serum
6 samples..."

7 Fourthly:

8 "To evaluate the effectiveness of present methods of
9 donor screening ..."

10 Just for interest, I think we can see the next
11 paragraph, the four participating centres, initially at
12 Los Angeles, St Louis, Missouri, Houston Texas, and then
13 later on the study in January 1976 the New York Blood
14 Centre joined the study. That gives us a little
15 background.

16 Over the page, please, we can see the diagnosis of
17 PTH used. This is at page 384, about half way down in
18 the paragraph commencing:

19 "All participating centres ..."

20 About six lines down from that towards the right,
21 the sentence commencing:

22 "The upper limits of normal was considered to be 45
23 international units, a value two standard deviations
24 positive the geometric mean."

25 Then the next paragraph:

1 "The diagnosis of hepatitis was made if within 14 to
2 180 days after transfusion, or surgery for the control
3 group, two sequential ALT levels greater than 45 IU were
4 observed in the absence of other probable causes. These
5 abnormal samples had to be drawn three to 17 days apart
6 with at least one sample equal to or greater than 90IU
7 two times the upper limitation of normal."

8 If we could then, please, go to page 388, which is
9 0875, we should look, I think, at the source of blood.
10 I think one often sees the comment, "Well, in America,
11 of course, they were using paid donors and that's
12 different to here", but I think we can see in this
13 study, under "Relation of post-transfusion hepatitis on
14 the source of blood", it's stated:

15 "Blood from volunteer donors was used exclusively in
16 St Louis and in New York. Whereas both commercial paid
17 donors as well as volunteer donors ..."

18 As used at Los Angeles.

19 Then:

20 "Baylor Houston donor units collected by a hospital
21 blood bank, usually family or friends of hospitalised
22 patients ..."

23 Were used.

24 So certainly paid donors used at Los Angeles but not
25 seemingly, I think, at the other centres.

1 Then, please, page 395. 0882. This is under the
2 discussion part of the paper.

3 The paragraph commencing:

4 "Since the TTV study is an ongoing effort, our
5 sample size will continue to grow. Although our study
6 suggests that screening donor units for ALT levels might
7 be useful in reducing the incidence of non-A non-B
8 post-transfusion hepatitis, the data must be interpreted
9 with caution since the number of patients analysed to
10 date is small. Also, there are a number of causes for
11 an elevated ALT other than viral hepatitis, one possible
12 reason why 41 of the 75 patients given blood with an
13 abnormal ALT level did not develop evidence of hepatitis
14 in serial follow-up. Furthermore, 30 of the 65 non-A
15 non-B cases received blood with normal ALT values."

16 Then, finally, the very last line on the page, the
17 authors state:

18 "Screening volunteer donor units for ALT may be
19 useful in reducing the incidence of hepatitis although
20 further study is warranted."

21 Doctor, was this study to do with the first report
22 suggesting that ALT screening of donors may be useful in
23 seeking to reduce the incidence of post-transfusion
24 non-A non-B Hepatitis?

25 A. It certainly was the first work that I became aware of

1 very -- around about the time I was appointed to BTS
2 actually, appointed as a consultant, and I actually
3 remember obtaining this paper, which is taken from
4 a published conference proceedings, I think, from
5 Dr Aaron Kellner at that time in 1978, I think.

6 Q. Did that spark an interest in you?

7 A. That was really what triggered my interest in it, yes.

8 Q. What was your reaction to that paper?

9 A. Well, all I can say is what I did, what is documented
10 that I did in reaction to it, which was this was the
11 sort of basis of this and subsequent discussions with
12 people in the New York Blood Centre and others involved
13 in the study led me to propose that we should actually
14 do what is suggested here in the UK and try to set up
15 the prospective study based on the sort of model and
16 techniques that had already been developed in the
17 United States.

18 Q. Why did you think that should be done here?

19 A. Well, because we had no data. We had really no useful
20 data about the UK to compare the incidents of -- however
21 we defined it, the incidence of non-A non-B Hepatitis in
22 blood recipients, apart from the early studies that we
23 have already been through this morning, all we had was
24 the data from the United States, which was, you know,
25 considerably more recent and nothing at all really in

1 which -- a belief that non-A non-B Hepatitis was much
2 rarer in the UK but no serious factual evidence on which
3 to base our policy.

4 Q. Sir, I'm about to move on to another paper. I could
5 carry on or I could --

6 THE CHAIRMAN: That would be a good time.

7 (11.02 am)

8 (Short break)

9 (11.20 am)

10 THE CHAIRMAN: Yes, Mr Mackenzie.

11 MR MACKENZIE: Thank you, sir. Dr McClelland, we had looked
12 before the break at the 1978 report from America. If we
13 go back to your statement, please, paragraph 2.7. We
14 then, I think, see that in 1981 the same group in
15 America issued a report which confirmed and extended
16 their findings and led the authors to conclude:

17 "That ALT testing was a potentially useful method of
18 screening donors to reduce incidence of non-A non-B
19 Hepatitis. The observations in this report suggest that
20 about 40 per cent of the cases of non-A non-B
21 post-transfusion hepatitis in this study could have been
22 prevented by discarding units with an ALT level in the
23 upper 3 per cent of the distribution."

24 We should perhaps again briefly look at that report.
25 It's [\[LIT0010753\]](#).

1 On the next page, please, page 990, if we can note
2 in passing the source of the donors, in the right-hand
3 column, under "Characteristics of donors and
4 recipients", we see again that the blood from St Louis
5 and New York was obtained from volunteers, and between
6 1974 and 1976 the hospital in Los Angeles acquired most
7 of its blood from a similar population but some units
8 were also obtained from three commercial collection
9 agencies that depended on paid donors. And at Houston
10 blood was obtained from volunteers.

11 On, please, to page 993. This is the author's
12 discussion in the left-hand column, the second paragraph
13 commencing:

14 "We also conclude, on the basis of the results in
15 this study that ALT testing in a potentially useful
16 method of screening donors to reduce the incidence of
17 non-A non-B Hepatitis."

18 Then sticking with the left-hand column, second last
19 paragraph, the authors state:

20 "The benefits of initiating ALT screening must be
21 carefully weighed against the number of potential donors
22 that would be excluded, the overall incidence of
23 hepatitis in recipients and the severity of the disease.
24 Although non-A non-B post-transfusion hepatitis is most
25 often subclinical, approximately 20 to 40 per cent of

1 patients who contract this disease are asymptomatic. At
2 least 25 per cent of all affected patients have amino
3 transaminase elevations lasting longer than six months
4 ... The development of chronic hepatitis and
5 progression to cirrhosis have been observed, although
6 the precise frequency of these complications is
7 uncertain.

8 "Other considerations must be taken into account if
9 widespread ALT testing of blood donors is to be
10 initiated. These include the uncertainty about how long
11 to defer a donor whose blood was rejected ..."

12 Et cetera:

13 "Advising donors of the implications of the ALT
14 level would also pose a special problem. In addition,
15 adjustments might have to be made for the observed
16 differences between ALT levels in male and female donors
17 and for the ages of donors. Nonetheless, it appears
18 from this study that screening donor blood to eliminate
19 units with elevated ALT levels would result in
20 a substantial reduction in non-A non-B post-transfusion
21 hepatitis.

22 "Although ALT screening lacks the sensitivity to
23 detect all infectious units and lacks the specificity to
24 detect only infectious units, the high correlation
25 between an elevated ALT level and infectivity of

1 transfused blood provide as compelling argument that
2 such screening should be instituted."

3 Et cetera.

4 I take it, doctor, you would have been aware of that
5 report when that came out?

6 A. Yes.

7 Q. Returning to your statement, please, we are then on to
8 page 6.

9 You then tell us about another surrogate test which
10 came along, namely antibody to the Hepatitis B virus
11 core antigen. In paragraph 2.8 you explain:

12 "The use of a test for antibody to the Hepatitis B
13 virus core antigen (anti-HBc) also emerged as an
14 alternative or complementary approach to surrogate
15 testing. In 1984, the TTV study group reported that the
16 presence of anti-HBc in donor blood was also associated
17 with a rate of non-A non-B Hepatitis in the recipients."

18 The reference for that, without going to it, is
19 Stevens and others, 1984. Our reference [\[LIT0013755\]](#).

20 You go on to state, doctor:

21 "A parallel study published in 1986 reported that
22 'of 193 recipients of blood positive for antibody to the
23 Hepatitis B core antigen ... 23 (11.9 per cent)
24 developed NANB PTH compared with 12 (ie 4.2 per cent) of
25 288 recipients of only anti-HBc negative blood.' Both

1 these studies concluded that an elevated ALT value and
2 the presence of anti-HBc acted independently on the
3 attack rate for PTH."

4 I think in short, doctor, either it was known at
5 that time or came to be known that the two different
6 types of surrogate testing, ALT and anti-HBc, seemed to
7 identify two different groups of donors.

8 A. That was the conclusion from this study, and I think
9 later on I'm sure we will refer to a study carried out
10 much more recently in Scotland by Dr Jack Gillon and
11 colleagues, and they found exactly the same thing that
12 these were really independent -- they existed in two
13 populations of donors and both appeared to independently
14 have some association with the risk of PTH in the
15 recipient.

16 Q. Another paper I should perhaps refer to for
17 completeness, we looked at the TTVS papers 1970 and 1981
18 and ALT testing, and I think Harvey Alter at the
19 National Institute of Health in the US had their own
20 prospective study on ALT as a surrogate marker for
21 post-transfusion hepatitis.

22 If we go to that report, please, it's [\[LIT0011817\]](#).
23 This is Alter's report in 1981 and just reading the
24 abstract it's stated -- I won't read it but in short,
25 I think, Alter's group also found an association between

1 elevated ALT levels in donors and an increased risk of
2 recipients contracting post-transfusion non-A non-B
3 Hepatitis. Is that correct?

4 A. Yes.

5 Q. Again looking at the source, blood, in the middle
6 paragraph, we can see just on our screens:

7 "Blood donors were all volunteers in the NIH study."

8 We should also, perhaps just for completeness, see
9 in the right-hand column at the top "The criteria for
10 diagnosis of post-transfusion hepatitis" used in this
11 study. I think similar but a little different to the
12 TTVS:

13 "In this study hepatitis was diagnosed when between
14 two and 26 weeks after transfusion a patient with
15 a normal pre-operative ALT level demonstrated a rise in
16 the level of ALT to 2.5 times upper limit of normal, ie
17 110IU, followed one or more weeks later by an elevation
18 at least two times upper limit of normal, ie 88IU."

19 Perhaps interesting to look at the author's comment
20 at the end of the paper, the very last page, please,
21 page 634, our reference 1821. In the middle column,
22 please, at the bottom, the authors state:

23 "For the blood recipient the ALT test offers new
24 hope for hepatitis prevention. For the donor it offers
25 new information but perhaps information that is not

1 really desired. For the blood supplier it increases the
2 complexity and cost of blood delivery and reduces the
3 available amount of a product already in critically
4 short supply. ALT testing of donors is thus in a
5 tenuous balance between risk and benefit. The balance
6 shifts towards testing when one considers that
7 approximately 30 per cent of PTH might be prevented but
8 this is tempered by the realisation that 70 per cent
9 will not be prevented and that even the prevention of
10 30 per cent is in some doubt unless confirmed by
11 randomised clinical trial. The balance also shifts away
12 from testing when one considers the estimated additional
13 cost and the potential loss of donors. It is
14 a difficult equation whose solution will require thought
15 and planning."

16 So that was the view of the authors in 1981.

17 Presumably, would that also have been your view in
18 1981 as well, that proper a trial was required rather
19 than a rush to introduce surrogate testing?

20 A. Yes, absolutely.

21 Q. Returning to your paper, please, doctor -- your
22 statement, rather, at page 6, if I may, in
23 paragraph 2.9, picking up again in anti-HBc as test you
24 state that:

25 "The observed association between an antibody to the

1 Hepatitis B virus and donor blood and transmission of
2 NANBH has not been explained although it has been
3 suggested that individuals who have anti-HBc may be more
4 likely to have exposed themselves to a variety of
5 blood-borne infections and are therefore more likely to
6 be infected."

7 Essentially, is anti-HBc identifying donors -- or
8 more likely to identify donors who have injected drugs
9 at some point?

10 A. Yes, or people, particularly gay men, who have large
11 numbers of sexual partners would be the over group.

12 It's a little more complicated than that because, of
13 course, Hepatitis B is very prevalent in some parts of
14 the world and in some ethnic communities, so it also --
15 Hepatitis B core antibody is quite common in certain
16 racial groups and that poses -- that's probably more
17 a reflection of the endemicity of Hepatitis B in those
18 populations than it is a reflection of particular
19 behaviours, but from a blood donor point of view it
20 raise as whole extra lot of problems, which we can touch
21 on if you wish to.

22 Q. I don't think we have to just now, doctor. Returning to
23 your statement, please, in paragraph 2.10, you explain:

24 "As late as 1986 Dienstag and Alter described the
25 important limitations of both ALT and anti-HBc as

1 surrogate tests."

2 You provide a quote. It might be worth us going to
3 the paper to see the full quote, if we may. We looked
4 at this paper earlier. It's [\[LIT0011675\]](#). At page 76,
5 which is our page 1684.

6 In the left-hand column, please, about half way
7 down, the sentence commencing:

8 "Both these indirect assays have the disadvantage of
9 relatively low sensitivity and specificity (both in the
10 range of 60 per cent) and a very low positive predictive
11 value (12 per cent in the NIH study)."

12 Could I pause, doctor? What's meant by a "positive
13 predictive value"?

14 A. It's a measure of efficiency of the test in predicting
15 a particular outcome in this case, the development of
16 non-A non-B Hepatitis in the recipient.

17 Q. Okay. Returning to the passage:

18 "If adopted, the anti-HBc test will result in the
19 loss of 4 to 8 per cent of the donor population and the
20 sustained loss of probably 2 to 4 per cent. Cost and
21 time are other detrimental elements to the adoption of
22 either/or both of these non-specific assays. Despite
23 these negative feature, however, the accommodating data
24 that chronic NANB hepatitis leads to cirrhosis in 10 to
25 20 per cent of cases has served as compelling evidence

1 for the need to rely on indirect assays as an interim
2 measure until such time as specific NANB hepatitis
3 assays are developed. The major components of the blood
4 delivery complex are currently considering the adoption
5 of either the anti-HBc test or both the ALT and the
6 anti-HBc test. Because of the cost and significant
7 donor loss engendered and because of recent introduction
8 of mandatory screening of all donor blood for antibody
9 to HTLV-III, adoption of yet another one or two donor
10 blood screen screening tests represents a very complex
11 and difficult decision. Nonetheless, increasing
12 documentation of the chronic sequelae of NANB hepatitis
13 and the continued high incidence of this disease after
14 transfusion have tipped the balance in favour of
15 adopting indirect assays for NANB hepatitis carrier
16 detection."

17 So it seems that in the mind of Alter, at least, as
18 at 1986, while he recognised that the introduction of
19 surrogate testing was a balancing exercise looking at
20 the pros and cons, in his mind at least by this time the
21 balance appeared to have tipped towards introducing such
22 screening tests, in particular having regard to the
23 increasing documentation of the seriousness or potential
24 seriousness of the disease and the continued high
25 prevalence. Is that a fair representation?

1 A. I think that's exactly what he was saying, and I think
2 elsewhere at the same time, I think he had also
3 expressed the view that possibly the time, while
4 prospective trial was still important, the time for
5 doing that had possibly passed.

6 Q. I think I have seen that reference somewhere else as
7 well. We will come on to look at this in due course but
8 we know that in 1986 I think blood banks in America did
9 start to introduce surrogate testing.

10 A. That's correct.

11 Q. Thank you. Then, please, returning to your statement in
12 paragraph 2.11 you explain:

13 "Low test specificity ... has serious consequences
14 when a test is used to screen a member of a healthy
15 population. A substantial proportion of the individuals
16 who test positive and who therefore will be rejected as
17 donors because of the risk of transmitting NANBPTH will
18 not in fact have NANBPTH, nor will their blood contain
19 the relevant infectious at. Nevertheless, such
20 individuals have to be informed that their donations can
21 no longer be accepted and the risk that their blood
22 could transmit hepatitis must be part of the
23 explanation. This can have the effect of converting
24 a person who correctly considers themselves to be in
25 good health into one who has been given information that

1 indicates that he may be afflicted with a serious
2 infection. This problem can only be avoided if there is
3 some form of additional test (often termed
4 a confirmatory test) that can reliably demonstrate the
5 presence or absence of infection."

6 Of course, if one is using a surrogate test for
7 non-A non-B Hepatitis, there won't be a confirmatory
8 test.

9 A. By definition there was no specific test.

10 Q. Yes. Thank you. Then over the page, please, in your
11 statement, we have, I think, ranged quite far and wide
12 this morning but I would now like to really follow
13 essentially in a chronological fashion what happened in
14 Scotland and the UK in respect of considering the
15 question of surrogate testing.

16 At page 8 of your statement under your subheading
17 you state:

18 "The consideration given by the SNBTS in the 1980s
19 to whether or not surrogate testing of blood donors
20 should be introduced ..."

21 I should explain, of course, that now in your
22 statement you are answering a series of standard
23 questions that we asked all the witnesses.

24 Before we go to your answer, doctor, I think the
25 starting document is perhaps this, [\[PEN0171737\]](#).

1 This, doctor, is a minute of an ad hoc meeting held
2 at the Medical Research Council on 12 February 1979.
3 You weren't present at this meeting, doctor, we can see
4 those who were. Professor Mollison chaired the meeting
5 and some other names we recognise there as well,
6 including perhaps Professor Sherlock,
7 Professor Zuckerman and others. No, I think, Scottish
8 representation at that meeting, though.

9 A. No.

10 Q. I think in short the meeting was convened to consider
11 the question of non-A non-B Hepatitis, and if we go to
12 the final paragraph, Professor Zuckerman referred to an
13 outbreak of parenterally transmitted non-A non-B
14 Hepatitis in dialysis unit at Fulham. And Dr Cleghorn
15 said that his impression was that PTH must now be rare
16 and it would be difficult to find many cases.

17 Over the page, please, a minute records:

18 "One and a quarter million units of blood were
19 transfused last year and very little had been heard of
20 NANBPTH. Professor Zuckerman pointed out however that
21 much non-A non-B associated PTH might be anicteric and
22 that the risk of progression to chronic liver disease
23 remained however mild the initial infection.

24 Professor Sherlock, agreeing with Dr Cleghorn, that PTH
25 was rare in the UK was nevertheless concerned about the

1 continued use here of blood products of commercial
2 origin."

3 Then two paragraphs down:

4 "Sir William Maycock --

5 THE CHAIRMAN: Sorry, is it one and a quarter or one and
6 three quarters. I think one and three quarters.

7 MR MACKENZIE: Oh, I see, one and three quarters. I wonder
8 if I could blow up -- I think, sir, it is one and three
9 quarters, thank you:

10 The paragraph commencing:

11 "Sir William Maycock asked whether plans for the
12 formal follow-up of cases of post-transfusion and post
13 blood product hepatitis might be made. Dr Craske
14 confirmed that there was continuing follow-up of
15 haemophiliacs under treatment."

16 In the next paragraph a few lines down:

17 "The chairman suggested and Professors Sherlock and
18 Zuckerman agreed that until there were such markers
19 a survey of PTH as suggested by Sir William Maycock was
20 not warrant."

21 Doctor, have you seen this minute before today?

22 A. Yes.

23 Q. What did you understand was being discussed in these two
24 paragraphs where Sir William Maycock asked whether plans
25 for the formal follow-up of cases of PTH might be made

1 but Professor Mollison, Sherlock and Zuckerman agreeing
2 that until there were such markers a survey of PTH was
3 not warranted? What was your understanding of that
4 passage?

5 A. I assumed that Sir William Maycock would have been
6 talking about some form of surveillance of transfusion
7 recipients, and they obviously were aware of the
8 importance of elevated liver enzymes at that time,
9 probably not aware of anything of relevance to
10 Hepatitis B core antibodies. So I assume that's some
11 form of -- it's pretty vague. I think Sherlock and
12 Zuckerman were expressing the view that probably the
13 markers, such as ALT, were probably too non-specific to
14 be used, and you have already taken us through a lot of
15 evidence that gives some, you know, credibility to that
16 opinion.

17 Q. Yes. Thank you.

18 PROFESSOR JAMES: Could I just perhaps add to that very
19 briefly? It looks to me as if what Maycock was suggests
20 really was just a sort of survey of the old sort, and
21 formal follow-up of cases of post-transfusion and blood
22 product hepatitis doesn't suggest a prospective study of
23 the sort that had been done in America. Therefore,
24 I imagine that the reason that Professor Sherlock and
25 Zuckerman and so on really felt that wasn't very helpful

1 was because that was precisely the not very informative
2 study, for the reasons that have been rehearsed before,
3 that the not very informative study that had not really
4 yielded anything very useful and, for example, to get
5 the MRC to embark on such a study would be a waste of
6 time.

7 MR MACKENZIE: Thank you. Returning to your statement,
8 please, doctor, at page 8, just developing things
9 chronologically you say you:

10 "... first became interested in this topic soon
11 after I joined the SNBTS in 1979. On 14 February 1980
12 the UK Medical Research Council convened a meeting of
13 a working party in post-transfusion hepatitis, being
14 a subgroup of the MRC blood transfusion research
15 committee. Dr Cash asked me to attend. One of the
16 agenda items were was NANBH."

17 You say:

18 "During that discussion I proposed the idea of
19 a prospective study to demonstrate the rate of non-A
20 non-B Hepatitis in blood recipients and the relationship
21 of infection in recipients, putative markers of the
22 infection in the donor's blood."

23 If we could perhaps then look at some documents
24 relating to this committee?

25 Firstly, the membership, please, [\[PEN0171715\]](#). We

1 can see for ourselves the membership.

2 Doctor, you were a member of this working party,
3 chaired by Dr Gunson, and other names we recognise
4 again, Professor Sherlock and Professor Zuckerman.

5 If we go to the minutes, please, of the meeting,
6 PEN0171478, at page 3 of the minutes, please -- I'm
7 sorry, I have gone to the wrong minute. It's the one
8 before that. It should be [\[PEN0171710\]](#).

9 We see these are the minutes of a meeting of this
10 working party on 14 February 1980, the names have been
11 redacted of those present, but we can see Edinburgh and
12 Southeast Scotland RBTC. So that must have been you,
13 Dr McClelland.

14 Discussion under paragraph 2 of the purpose of the
15 working party. We can see that it's stated:

16 "The DHSS advisory group on testing for the presence
17 of HBsAg and its antibody advised on methods and policy
18 with regard to the screening of blood donations and the
19 preparation of national standards. An ad hoc group had
20 met at the MRC at the request of DHSS in February 1979
21 as a result of discussions in the advisory group, and
22 this had resulted in the establishment of the MRC PTH
23 WP."

24 So I think you can see the genesis of that working
25 party.

1 Then it was agreed that the function of the MRC
2 working party was to promote research to assess, and
3 then over the page, a little hard to read but I think it
4 says:

5 " ... the nature and size of the problem of PTH in
6 the UK in particular reference to changes in transfusion
7 practice, eg the use of products prepared from pooled
8 plasma from large numbers of donors and the introduction
9 of commercial products from abroad. Studies should
10 include, 1, an assessment of any further need for
11 research into Hepatitis B ... 2, investigations to
12 assess the incidence of non-A non-B Hepatitis in the UK,
13 particularly with the risk of introducing the infection
14 by blood transfusions, and, 3, the position of research
15 to characterise the agents and reagents associated with
16 this form of hepatitis and to derive diagnostic tests."

17 Under 3, the subheading "The problems of non-A non-B
18 Hepatitis viruses" it's stated:

19 "There was a wide-ranging discussion regarding the
20 incidence of PTH in the UK. There was agreement that
21 the reported cases of Hepatitis B were very few. No
22 cases of non-A non-B Hepatitis related to whole blood
23 transfusions had yet been reported despite enquiry of
24 hospitals in London where open heart surgery was carried
25 out."

1 The second last paragraph -- this must have been
2 you, Dr McClelland -- said:

3 "Work was proceeding at the Southeast Scotland BTC
4 into the problem of non-A non-B hepatitis associated
5 with blood transfusion. He suggested that
6 a multi-centre study might be sponsored by the WP. It
7 was agreed however that this matter should be deferred
8 until candidate laboratory tests were available."

9 Pausing there, doctor, do you have any recollection
10 of the discussion at this meeting?

11 A. Not really but I clearly fell asleep at that point or
12 the minute is slightly creative, because I certainly
13 behaved as though that agreement had not been reached at
14 the meeting.

15 Q. Because for the second meeting you had produced a draft
16 protocol for such a study --

17 A. Yes.

18 Q. -- which would be slightly inconsistent with you having
19 agreed that no such study was required.

20 A. Entirely.

21 Q. I understand. If we just complete this minute, at the
22 bottom of the page it states:

23 "It was decided that the following problems needed
24 investigation: (a) the identification of donors and the
25 units of blood associated with possible cases of non-A

1 non-B Hepatitis, (b) research into methods of
2 identifying the viruses associated with non-A non-B
3 Hepatitis, and (c) epidemiological surveys to assess the
4 size of the problem in relation to blood transfusions."

5 Could one have properly investigated (a), (b) and
6 (c) without carrying out a multi-centre study of the
7 type you proposed?

8 A. Not really, certainly not (c). I mean, methods of
9 identifying the viruses could have gone in many
10 technical directions.

11 Q. Lastly, in this minute, over the page, please, again
12 it's a little hard to read but somebody -- a redacted
13 name -- said --

14 THE CHAIRMAN: "That as a result of the meeting ..."

15 MR MACKENZIE: "As a result of the meeting of the ad hoc
16 group in February 1979 three special project grants had
17 been approved for research into the incidence
18 epidemiology and clinical features of non-A non-B
19 Hepatitis and a fourth would probably soon be approved
20 too. There was open to the working party to initiate
21 pressure projects in this field."

22 Put that minute to one side, thank you. If we turn
23 then to your statement, please, at page 8, about half
24 way down paragraph 1.1 you say:

25 "In the second meeting of the MRC working party on

1 25 June 1918 I put forward a draft protocol for
2 a prospective study of surrogate testing for non-A non-B
3 Hepatitis which drew in the protocol the US
4 transfusion-transmitted viruses study. The need for
5 such a study was challenged by Professor Zuckerman on
6 the grounds that it would merely be repeating
7 a completed study that had been funded by the MRC and
8 published in 1974. He suggested that retained samples
9 from the patients who had participated in the earlier
10 study would be available and could be used in studies of
11 markers of infectivity."

12 As we will come to see:

13 "It later emerged that these samples had been
14 misplaced or destroyed."

15 Again, doctor, do you have any recollection of the
16 meeting on 25 June 1981?

17 A. Yes, a vague recollection.

18 Q. Did you go into a meeting feeling a need for
19 a prospective study? Do you remember that?

20 A. Yes, I also had -- from the previous minute that you
21 just took us through, referred to, you know, it was open
22 to the working party to produce further proposals, which
23 I took as a very strong steer that we should be
24 producing further proposals. That was very much, you
25 know, in my mind when I drafted this thing out for the

1 committee. So I felt strongly that it was really
2 important to do this.

3 Q. And how was your proposal received at the meeting?

4 A. I think Harry Zuckerman was, as I recall, quite miffed
5 because I think in my proposal I hadn't read -- I wasn't
6 aware of the 1974 study when I wrote the proposal and
7 I made a statement which implied that it didn't exist,
8 and he wasn't very happy about that, and I think
9 basically I came away with the feeling that he thought
10 he had done it and that it didn't need to be done again,
11 and that all these samples had been laid down and at
12 least could be used for one important part of the work,
13 which was to evaluate some of the candidate markers, as
14 they were called, some of the things that people thought
15 might be specific markers for non-A non-B Hepatitis.
16 That would have been a useful exercise because if that
17 had actually yielded evidence that could lead relatively
18 quickly to identifying a specific test, then obviously
19 there would be no need to go ahead with testing
20 surrogate tests, which everybody knew was going to be
21 a real pain to do. It was never going to be an easy
22 study.

23 Q. That was Professor Zuckerman's reaction to your proposed
24 study. Do you remember the reactions of any of the
25 other members?

1 A. Not really. I do remember his reactions. I think it's
2 also fair to say -- he was very eminent, he was a very
3 big cheese in the field at that time and I was a compete
4 upstart. I had only just come into transfusion and
5 I wasn't -- I didn't know anything about hepatitis. So
6 I think he felt a bit superior really. I certainly felt
7 he was behaving very superior.

8 THE CHAIRMAN: You would remember being put down by him.

9 A. I do, yes, you remember those things.

10 PROFESSOR JAMES: If I could just add to that that as
11 a matter of fact the samples were almost certainly
12 destroyed by cleaner turning off a refrigerator, a deep
13 freeze, where the samples had been stored some years
14 earlier.

15 MR MACKENZIE: I think there is reference to that.

16 PROFESSOR JAMES: My friend did the study.

17 MR MACKENZIE: I thought you were going to confess your
18 friend was the cleaner.

19 PROFESSOR JAMES: I don't know who he or she was. But my
20 friend was very sad when he discovered this.

21 MR MACKENZIE: If we could perhaps, doctor, look briefly at
22 the minutes, if I may, it's page 8 of [\[PEN0171741\]](#). We see
23 unredacted minutes. I think these perhaps were produced
24 by yourself, doctor, for which we are grateful, of the
25 meeting of June 25th 1981. We can see who was present.

1 Page 3, please. We can see under the subheading at

2 3.3:

3 "Identification of donors and units of blood
4 associated with possible cases of non-A non-B
5 Hepatitis."

6 And:

7 "Screening of donors for transaminase levels."

8 We can see reference, doctor, to your tabling
9 a protocol for:

10 "A prospective study of blood transfusion associated
11 hepatitis in Edinburgh and Manchester."

12 I think importantly this study would follow up both
13 donors and recipients.

14 Then we see the next paragraph:

15 "Professor Zuckerman pointed out that a study
16 already had been undertaken ..."

17 You have referred to that.

18 The next paragraph states:

19 "An evaluation of the value of ALT screening of
20 blood donors had been carried out at the BTS at Edgware
21 (Northwest Thames). Problems had been encountered as it
22 had proved difficult to trace the fate of found donors
23 to who have raised ALT values. The value of this
24 procedure in the UK at the present time was agreed by
25 the working party to be of doubtful value."

1 What's meant by "this procedure"? Is that simply
2 looking at donors?

3 A. I think it probably refers to the ALT test specifically.

4 Q. So ALT as a surrogate test for NANBH being of doubtful
5 value?

6 A. Just on the basis that the first line says:
7 "Evaluation of the value of ALT screening of blood
8 donors ..."

9 You know, this procedure of doubtful value, I think
10 that's what it refers to.

11 Q. So a scepticism towards ALT testing perhaps?

12 A. Yes. I have to say I don't recall, and I don't recall
13 seeing in the course of preparation for this, the report
14 of that study. I may have seen it but I don't remember
15 it.

16 Q. Over the page, please, at page 4, we see Dr Polakoff
17 suggested:
18 "An effort should be made to follow up the patients
19 involved in the original MRC study and enquiries should
20 be made to see if the original collection of sera ...
21 were still available ... this was agreed to by the
22 working party and the chairman (Dr Gunson) said that he
23 would write to Professor Sherlock and Professor
24 Zuckerman who had left the meeting to see if the patient
25 records and serum specimens were still available.

1 Dr McClelland's project could then be reconsidered in
2 the light of the specimens and clinical data available
3 from the earlier study."

4 We should very briefly, I think, doctor, look at
5 your proposed study. It's [\[PEN0171486\]](#). This is
6 entitled "Proposal for a prospective study of
7 post-transfusion hepatitis in the UK". You have written
8 a handwritten note more recently.

9 Over the page, please, at 1487 under "Summary":

10 "There has been no prospective study in the UK of
11 the incidence of subclinical hepatitis following
12 transfusion of blood or single donor blood products."

13 Is that perhaps the statement that provoked
14 Professor Zuckerman.

15 A. I would think so, yes.

16 Q. You go on:

17 "This information is essential to assess the
18 importance of this problem and as a basis for the
19 planning and evaluation of future donor screening
20 strategies."

21 Why did you say that?

22 A. Well, because I believed it was factually correct. We
23 didn't have the information needed to plan anything.

24 Q. Your position perhaps was that it's self-evident that
25 you need such information before you can properly assess

1 the importance of the problem and decide on planning and
2 evaluation of future donor screening strategies?

3 A. Absolutely. As I say, I wrote that I was not aware of
4 the findings of the MRC study published in 1974, but
5 when I read it, I realised it didn't really tell us what
6 we needed to know, not least because it was done over
7 the period of introduction of Hepatitis B testing.

8 Q. Yes.

9 And you say:

10 "An outline proposal is presented for a prospective
11 study which would involve two UK centres and enrol 600
12 patients over a three-year period, with matched
13 controls."

14 Could we perhaps just go to for reference, without
15 looking at it in detail, page 1491, we can see you set
16 out the objectivity of the study. I won't read them.
17 We can read them ourselves.

18 Over the page, please, we can see:

19 "These objectives are broadly the same as those of
20 the USA TTV study."

21 I think in fact, doctor, you had been in
22 correspondence with some of the participants in that
23 study and had received their study protocol?

24 A. I had the documents, yes.

25 Q. If we could perhaps for completeness go to page 8 of
[\[PEN0170841\]](#),

1 we can see this is a letter, 10 February 1981, from
2 Dr Kellner of the New York Blood Centre to yourself,
3 doctor, second paragraph:

4 "To get started on the information you requested,
5 I am enclosing a copy of the clinical procedures manual
6 for the TTV study and an early interim report."

7 So presumably, doctor, you had been in contact with
8 those at the New York Blood Centre and had asked them
9 about their study and asked for documentation relating
10 to it?

11 A. Exactly. Dr Kellner had actually visited us in
12 Edinburgh on a different matter and I had chosen to, you
13 know, raise this question with him because I didn't know
14 any of the other -- I was a very new boy in transfusion
15 and I didn't know any of the other people but that gave
16 me the opportunity to get in contact with them.

17 Q. Thank you. Then returning to your statement, if I may,
18 at page 8, so essentially there have been two meetings
19 of the MRC working party on post-transfusion hepatitis
20 but then paragraph 1.2 you explain:

21 "This working party had know further meetings and
22 was disbanded in 1982. I do not know why that
23 happened."

24 One explanation may be this, doctor, if we go,
25 please, to [\[SNB0025864\]](#). This is a letter from

1 Helen Duke of the MRC to Dr Cash of 19 July 1982, in
2 short advising of the disbanding of the MRC blood
3 transfusion research committee.

4 Now, the working party on post-transfusion hepatitis
5 was a working party of the blood transfusion research
6 committee. So it may have been with the disbanding of
7 the parent committee, then the daughter working party
8 would also be distanced. Is that a possible
9 explanation?

10 A. It's a possible explanation. I mean, it's a very
11 anodyne letter. It's quite an extraordinary letter
12 actually. I haven't seen this before. At least I don't
13 recall seeing it before.

14 Q. I see. Take a second to look at it.

15 A. For the MRC board to conclude in mid-1982 that there was
16 no more research to do in transfusion is quite bizarre
17 actually. So I suspect that possibly the real reason
18 for the disbanding is not quite as simple as -- not
19 quite as reflected here, but I have no idea what it may
20 have been.

21 Q. And the author states that the work of the committee was
22 being duplicated elsewhere, so not perhaps that there
23 was no more work to do in research into transfusion but
24 rather that the work was being duplicated elsewhere.
25 What would your view on that have been?

1 A. Well, I think that for the MRC as the sort of prime
2 responsible state body for medical research to delegate
3 this to whoever they were delegating it to -- and it's
4 not clear to me -- the British Blood Transfusion Society
5 was a newly-formed professional society, which had no
6 funds, it had absolutely no capacity to initiate major
7 research. It doesn't make sense.

8 Q. One can speculate there may have been politics at play
9 but --

10 A. I'm absolutely sure there were but I have no idea about
11 what.

12 Q. No. I won't invite you to speculate any further,
13 doctor, thank you.

14 Returning to your statement, please --

15 THE CHAIRMAN: Could we just have a look at the manuscript
16 note at the bottom briefly? It might be ...

17 Yes. Clearly, someone at PFC is wondering whether
18 something should be done about it or whether it should
19 just be filed away quietly.

20 A. The note is addressed to Mr Watt, that's Mr John Watt,
21 and the Irene will have been his then secretary,
22 Irene McKinney.

23 THE CHAIRMAN: Yes.

24 A. I think she is simply saying that she done have a file
25 for this and she's asking where to file it.

1 THE CHAIRMAN: She doesn't have a file for it? Right.

2 That's not a file for lost causes then at this stage?

3 MR MACKENZIE: Returning to your statement, please, doctor,
4 at page 8 -- so that's the end of MRC working party on
5 post-transfusion hepatitis and indeed the end of the MRC
6 subcommittee in blood transfusion research.

7 A. Yes.

8 Q. So what we then see is, you say:

9 "Because post-transfusion hepatitis was seen to be
10 an important topic, Dr William Wagstaff, then regional
11 transfusion director in Sheffield, called together a
12 group chaired by Dr Gunson to continue work on
13 hepatitis. This was called the regional directors'
14 working party on transfusion-associated hepatitis."

15 I think if we can go to a letter, please,
16 [\[PEN0171502\]](#), we will see a letter from Dr Wagstaff to
17 yourself of 14 May 1982 inviting you to join this new
18 working party.

19 The second paragraph of the letter states:

20 "We are all very much aware of residual problems in
21 the field of Hepatitis B. Added to this, of course, we
22 are waiting with keen interest the development of
23 reliable and useful tests for non-A non-B virus."

24 Returning to your statement, please, the bottom of
25 page 8, you say:

1 "This new working party first met on
2 27 September 1982 and the working party set its own
3 terms of reference as 'to promote the investigates of
4 the epidemiology of transfusion-associated hepatitis, to
5 promote research into the methods of prevention, and to
6 make represents to the directors of the UK transfusion
7 services regarding procedures and screening tests
8 necessary for the prevention.'."

9 You again agreed to provide an outline study
10 protocol for the next meeting:

11 "... for (a) determining the incidence of recipients
12 with transaminitis ... so that a library of putative
13 non-A non-B recipient samples could be collected, (b)
14 determining the incidence of PTH in recipients of blood
15 positive for existing putative markers for non-A non-B
16 Hepatitis."

17 We can look first at the membership of this new
18 group, page 4 of [\[PEN0171716\]](#), please, chaired by Dr Gunson.

19 We can see the members: Dr Barbara from Edgware,
20 Dr Lane, Dr Howard-Thomas, Dr Craske, yourself, doctor,
21 Dr Mitchell, Dr Bruce Cuthbertson, many names we are
22 familiar with now.

23 The minutes, please, of the first meeting are
24 [\[PEN0171716\]](#). We can see these are the minutes of the
25 inaugural meeting. The terms of reference were set out,

1 as you have set out in your statement.

2 Page 2, please. Under paragraph 5 "Discussion of
3 transfusion-associated hepatitis":

4 "Dr Gunson felt that the quarterly TAH reports were
5 an inadequate estimate of true incidence of TAH."

6 Then scrolling down, please, to "Prospective study":

7 "These would be considered in the light of the above
8 information."

9 It's a collection of existing data and evidence.

10 Then:

11 "Dr McClelland will produce an outline study a
12 protocol for the next meeting of either (a) determining
13 the incidence of recipients with transaminitis so that
14 a library of putative non-A non-B Hepatitis samples
15 could be collected or (b) determining the incidence of
16 PTH in recipients of blood positive for existing
17 putative markers of non-A non-B Hepatitis. This might
18 also include non-specific markers like ALT level and/or
19 presence of anti-HBc in the donor."

20 Doctor, what's the difference between (a) and (b)?

21 Are they two different studies?

22 A. I was trying to produce something that the committee
23 would go with and there are two quite different studies.
24 One is much simpler. The first study is substantially
25 simpler. It doesn't involve -- the first study was

1 designed purely to collect a lot of samples from a lot
2 of patients who had received transfusion, measure the
3 serial samples, measure the frequency of elevated liver
4 enzymes and then keep the samples archived, because, as
5 I have already said, there were several candidate tests
6 being developed in the UK and elsewhere and this was the
7 sort of material that one needed to test them.

8 The second study was much closer to the one which we
9 already looked at, which was a prospective study,
10 looking at both the recipients and the donors in terms
11 of the consequences of blood that was either positive
12 for or negative for a particular test result.

13 Q. Okay. If we look over the page, please, at the top we
14 see the latter type of studies are option b. It would
15 be preferred by Dr McClelland and Dr Thomas. So was
16 your preference at that stage still something closer to
17 the TTVS study?

18 A. Absolutely.

19 Q. Then we see for completeness under "Library of putative
20 samples":

21 "Although the American TTV study was originally
22 supposed to be able to provide samples for analysis in
23 the UK, this has not materialised. Dr Gunson will
24 therefore write to the MRC to ask if the samples from
25 the 1974 study could be made available ..."

1 That's that meeting.

2 Could we then, please, return to your statement at
3 page 9 now?

4 In paragraph 1.3 we see that this second meeting of
5 the working party was on 18 January 1983 and you
6 presented a study protocol, and the members agreed to
7 send comments to you, and the comments were in due
8 course favourable.

9 Can we look at the minutes of this meeting, please, page 4
10 of [\[PEN0171507\]](#)? Over the page, please, at page 2, under 6
11 "TAH studies", a listing of the different types of study
12 one could have.

13 At the bottom of the page:

14 "It was agreed that some form of study was needed so
15 that the UK is equipped to answer queries about any
16 specific or non-specific test for non-A non-B offered
17 from abroad. Also prospective comparative studies are
18 only feasible ethically when the outcome is unknown and
19 we are still at that stage."

20 Then:

21 "Fate of the 1974 MRC study:

22 "Dr Gunson will again ask MRC if samples are
23 available ..."

24 6.5:

25 "Dr McClelland circulated a draft proposal for

1 a prospective study of non-A non-B Hepatitis."

2 There was to be contact with Newcastle to ask about
3 availability of samples from their study. That's the
4 Collins paper of 1983.

5 Perhaps this important paragraph:

6 "If MRC samples are not available, the working party
7 will put forward proposals for some form of study to the
8 MRC and DHSS".

9 I will come to look at your proposed study in
10 a second, doctor, but we can also see item 8 "AIDS".
11 I think this is the first reference to the minutes of
12 this working party to AIDS, which perhaps on one view
13 might be surprising, given this is a working party on
14 hepatitis but, on the other hand, is completely
15 unsurprising, given how AIDS really exploded on to the
16 scene at this time.

17 If I could briefly, please, look at your outline
18 proposal you presented to this meeting. It's
19 [\[PEN0171514\]](#).

20 If we go first to page 5, please, the last page,
21 1518. We can see the date in the bottom right-hand
22 concern, it's 10 January 1983. You are the author,
23 doctor.

24 Back to the first page, please. Doctor, without
25 going through this in detail, can you tell us really in

1 summary what you proposed to do?

2 A. Well, there were two types of study and what I was
3 proposing was not recommending the first one but
4 recommending the second one, which was essentially the
5 same as the study we have already looked at. It was
6 a study to look at the consequence -- test donors and
7 test patients and look at the consequences in terms of
8 Hepatitis ALT elevation in the recipients of receiving
9 blood that had been tested or blood that had not been
10 tested. So it was essentially the same study.

11 Q. I'm not sure if I understand the difference because the
12 first study at 1.1:

13 "A prospective study of a large number of
14 transfusion recipients and the respective donors."

15 A. I think it's not -- looking at it now, it's not correct
16 actually because the logic of that -- it should be just
17 a study of recipients, looking at the objectives, to
18 measure the current incidence of PTH in the selected
19 areas and provide a library of patient samples. So
20 I think the reference to donors is an error quite
21 honestly.

22 Q. Right.

23 A. It's confusing, I agree.

24 Q. I wondered whether option 1 was a large-scale, ambitious
25 study like the TTVS study, whereas option 2 was a more

1 modest, perhaps more feasible study, but is that a wrong
2 understanding?

3 A. Actually question 2 is the more difficult one because
4 question 2 implies studying the consequences of an
5 intervention, ie testing, and comparing that in some
6 controlled way with the consequences of no intervention,
7 which is current practice, no testing, and that's
8 technically a lot more difficult to do than the first
9 one. I think I made a mistake. It was probably done in
10 a hurry.

11 Q. Okay. Certainly if we go then to --

12 THE CHAIRMAN: I'm not sure. If you look at the second
13 group of paragraphs, it was 1.2 that you decided to
14 pursue or recommended to pursue, and the first study was
15 not done because of its scale and potential costs and
16 the fact that you couldn't even set out to prepare it.

17 I'm just wondering if Mr Mackenzie wasn't right in
18 suggesting to you that 1.1 was effectively the TTVS
19 scale study. I'm not sure it's important,
20 Dr McClelland, I just don't want to leave the evidence
21 in a slightly confused state if we can clarify it.

22 A. Sure. I'm not sure that I can clarify that, sir.
23 Looking at it again, I hadn't really spotted this
24 inconsistency, to be honest, when I re-read this.

25 THE CHAIRMAN: Perhaps it's one of these cases where the

1 ignorant reader can interpret the words better than
2 yourself.

3 A. That is highly possible, sir.

4 THE CHAIRMAN: I don't want to worry about it. If you are
5 not sure yourself, that's fine.

6 A. I'm not sure at this moment in time, no, I'm not.

7 MR MACKENZIE: What perhaps is important for your purposes,
8 Dr McClelland, is that your proposal was still to follow
9 up recipients.

10 A. Yes, that is a common feature of both the studies.

11 Q. Yes, and the objective is set out in paragraph 3.1 and
12 plan of the study in 4.1. And then, page 3, 1516, we
13 can see in paragraph 4.3 the laboratory tests author
14 proposed to be undertaken, including ALT, anti-HBc and
15 then markers of putative non-A non-B systems being
16 developed at Edinburgh and the Royal Free hospital.

17 Perhaps, just out of interest, if we go again to the
18 last page, we can see the estimated cost of this study.
19 We see the figure of -- I think, is it? -- £63,000. Or
20 is it 83? -- £63,000 over an 18-month period.

21 PROFESSOR JAMES: Sorry, Dr McClelland, I just missed this.
22 It was on a previous page. Was that a proposal to
23 actually test for ALT and core antibody and exclude
24 those people -- their blood -- from the recipients?

25 A. The proposal was to randomise into a group who received

1 blood that had been tested and blood that had not been
2 tested, and because we were concerned about the ethics
3 of transfusing blood that we knew had markers that had
4 already been associated with possible increased risk, we
5 would test the donation samples after the blood had been
6 transfused. So at the time of transfusion all the blood
7 would have the same knowledge associated with it.

8 PROFESSOR JAMES: I think it's rather important to emphasise
9 that this suggested study was precisely the effectively
10 controlled trial of the examination of the putative
11 surrogate markers that had been suggested earlier by
12 Alter in the States but actually which hadn't been
13 carried out. So effectively what Dr McClelland was
14 suggesting was sort of two for the price of one. It was
15 to try and find out the prevalence of probable non-A
16 non-B Hepatitis following transfusion, using parameters
17 like the transaminase being twice the upper limit of
18 normal et cetera, that really had not been done hitherto
19 either in the original MRC study nor for that matter in
20 the Newcastle study. And, second, to see what the
21 utility of excluding blood with those markers, those
22 putative markers was. So in my view, sitting here now,
23 it was a very good study.

24 MR MACKENZIE: Thank you. Do you agree, doctor, with the
25 explanation of the study?

1 A. This was what I certainly was wanting to achieve. You
2 have asked a supplementary question about this study,
3 which I have addressed in that second statement, which
4 I didn't realise until this morning you hadn't received
5 but which you now have, so we might want to just come
6 back to the adequacy of the study design and resources.
7 It's a question you have asked.

8 Q. I think we will come back to that maybe at the very end
9 of your evidence, perhaps.

10 A. Yes.

11 Q. Thank you. Back to your statement now, please, if
12 I may. At page 9, paragraph 1.4 -- we are now on to the
13 third meeting of this working party on 20 April 1983, at
14 which Dr Gunson had been informed by the MRC that
15 samples from its 1974 study were no longer available.
16 I'll give the references without going to them. It's
17 [\[PEN0171505\]](#) and [\[PEN0171507\]](#):

18 "The proposal for the proposed prospective study on
19 post-transfusion hepatitis was discussed.

20 Dr John Barbara, microbiologist in North London NBTS
21 undertook to prepare a joint proposal that would include
22 the North London RTC, where the incidence of PTH was
23 expected to be higher than in Edinburgh. It was minuted
24 that this might then be submitted to the MRC on behalf
25 of the working party."

1 We should, I think, look at the minutes for this
2 meeting. It's [\[PEN0171522\]](#). In paragraph 4
3 "Availability of 1974 MRC ... study samples":
4 "Dr Gunson had received letters ... duplicate sets
5 of study samples ... had both been lost or destroyed."
6 Then:
7 "Prospective TAH studies."
8 A discussion there, including Dr James, as he then
9 was, having sent yourself, doctor, the results of the
10 Newcastle prospective study.
11 Then the bottom of the page, "Dr McClelland's TAH
12 study proposal":
13 "So far a source of funding has not been found. In
14 the light of Dr James results the problem of Edinburgh's
15 likely low incidence of non-A non-B Hepatitis numbers
16 was raised."
17 Over the page:
18 "It was therefore suggested to Dr Barbara that
19 Edgware might provide a higher incidence area. He
20 agreed to ask Dr Davies (director, NLPDC) and will
21 submit a draft concerning the possibility of this.
22 Plans for a joint study with Edinburgh might then be
23 submitted to the MRC by the working party."
24 Doctor, do you remember the discussion at this
25 meeting, doctor?

1 A. I don't honestly remember but it was -- I think we were
2 impressed by the apparent low incidence in the Newcastle
3 study, which I think had not been published at that
4 time. I think you sent me the results. It certainly
5 was believed, possibly incorrectly, we now know, that
6 there was more post-transfusion hepatitis in North
7 London. So it seemed like a reasonable idea to include
8 that as one of the centres in the study.

9 Q. And what was the view of this working party on the need
10 for a study of the type you proposed?

11 A. Well, I think I said somewhere in my statement
12 actually -- and possibly the next paragraph -- that
13 there was really very little enthusiasm. There was
14 polite interest. But when it says on the previous page
15 of the minutes, "No source of funding has been found", no
16 source of funding had been seriously sought. Nobody had
17 gone back to the MRC, and I wasn't going to go back to
18 the MRC at that stage myself as an individual because
19 I knew I wouldn't get anywhere. I was depending on --
20 and, of course, the MRC had disbanded the subcommittee
21 to which it had sent an invitation to submit more
22 proposals. So it was perfectly clear there was going to
23 have to be a major effort made to obtain major funding
24 for this study and other resources, which we may come
25 back to.

1 Q. Obviously, you were of the view that there should be
2 such a study.

3 A. I was strongly of the view but I was beginning to get
4 a little bit worn down by that time actually because,
5 you know, there is only a certain amount one can do as
6 an individual and it wasn't lighting fires for anybody
7 else.

8 Q. By anybody else, do you mean the other members of this
9 working party or do you mean more widely?

10 A. Well, I mean other members of this working party because
11 this was the first jumping-off point to get something
12 done. If the working party had -- looking at the
13 membership of the working party, if those people had all
14 put their shoulders behind this, something probably
15 would have happened but that didn't happen.

16 Q. So you were largely driving forward this proposal by
17 yourself?

18 A. I was endeavouring to, yes.

19 Q. Thank you. Then back to your statement, please. At
20 page 9 of your statement, paragraph 1.5, you say:

21 "Despite searching for any documentation, I have no
22 recollection of the subsequent fate of this study
23 proposal and it was the Inquiry's preliminary report
24 that drew my attention to a statement made by
25 Dr Harold Gunson referred to in the judgment in the case

1 of A & Ors v The National Blood Transfusion Authority,
2 that he had submitted the proposal and that it had been
3 turn turned down."

4 I think it's a point of detail -- we won't go to it,
5 but it is paragraph 122 of the judgment where the judge,
6 Mr Justice Burton writes:

7 "The working party and 'petered' to an end in 1983
8 when no grant was obtained for the studies into
9 surrogate testing that they wanted to implement."

10 So it's possibly not entirely clear what the judge
11 means by "no grant was obtained for the studies". It
12 may be implicit in that a grant was implied for but it
13 may not be. Do you have any recollection?

14 A. No, I can't remember, and I think I couldn't work out
15 when I came to write this why I had kind of given up
16 because, you know, my teeth were fairly firmly into
17 this, and I think my next paragraph is what I recall as
18 being the reasons. Basically we were taken over by HIV.

19 Q. You do say that you were awaiting information from
20 Dr John Barbara to see if he could shed any light of the
21 fate of the proposal.

22 A. I wrote to him subsequent to submitting this statement
23 and he eventually replied, he confessed to no
24 recollection whatsoever.

25 Q. Okay. Then paragraph 1.6 of your statement you say:

1 "I have thought about why a prospective study was
2 not pursued at this time. I do recall being surprised
3 and dismayed by the notable lack of enthusiasm to commit
4 any resources to undertake what I believed was
5 a necessary study to try and determine if surrogate
6 testing had any value in reducing NANB post-transfusion
7 hepatitis."

8 You explain:

9 "I believe the main reason that the SNBTS lost sight
10 of NANBPTH for a period is that by early 1983 concern
11 about AIDS was increasing."

12 You:

13 "... became increasingly preoccupied with the
14 actions that the BTS should be taking to protect
15 patients against any possible risk of being infected by
16 locally collected blood donations."

17 The reference to:

18 "... May 1983 SEBTS prepared the first donor
19 information leaflet on AIDS ..."

20 Et cetera.

21 You say in paragraph 1.7:

22 "Looking back, I think it is the case that the work
23 related to AIDS ... distracted the attention of both the
24 SNBTS and the [service in England] from non-A non-B
25 Hepatitis for about three years. The working party did

1 not meet after September 1983 until it was reconvened on
2 November 24, 1986."

3 I take it, doctor, what you set out in paragraphs
4 1.6 and 1.7 remain your view about AIDS essentially
5 coming on to the scene and distracting attention from
6 hepatitis?

7 A. I think that must be the explanation because I know we
8 were -- most of my personal effort and attention was
9 focused on this for many months, certainly in 1983/1984.

10 Q. Yes.

11 A. I don't think that excuses a failure to grind on with
12 the other study, but I think it explains it.

13 Q. As an observation on my part, I think it's certainly the
14 case that our documents relating to post-transfusion
15 hepatitis are fairly scarce and possibly nonexistent for
16 years 1984 and 1985 and then we see more documents
17 reappearing again in 1986.

18 A. Yes.

19 Q. If I could then just complete this working party's
20 meeting in 1983, I think there was a final meeting on
21 27 September 1983. If we could start with the agenda,
22 please, which is [\[SNB0143029\]](#).

23 This is the agenda for the fourth meeting of the
24 working party. We can see item 4 "AIDS". So that's now
25 the priority.

1 Beneath that item 5, "Transfusion-associated
2 hepatitis", and we can see that it was proposed to
3 discuss various topics to do with hepatitis.

4 And in particular, 5.3 "Prospective TAH studies",
5 I think including particularly your one.

6 But if we then go to the minutes of the meeting
7 which are [\[SNB0143030\]](#), and in short, doctor, I don't
8 think there is any reference at all in the minutes to
9 the transfusion-associated hepatitis. Do you remember
10 the discussion at this meeting?

11 A. No.

12 Q. But from looking at the minutes in any event, it seems
13 to me that AIDS was the subject which took up most of
14 the time of the committee -- I'm sorry, of the working
15 party.

16 A. That's absolutely my impression.

17 Q. Yes. There is also discussion of immunoglobulins but
18 certainly not hepatitis. Then, as we have just noted,
19 this meeting -- this working party, rather, went into
20 abeyance or fell asleep or stopped meeting, until it was
21 resurrected at the end of 1986.

22 A. Correct.

23 Q. Thank you, doctor. What I would like to do, if I may,
24 is to put your statement to one side, please, and look
25 chronologically at events in 1986 and 1987. I think the

1 next main development, perhaps, if we can go to America
2 and [\[SGF0010783\]](#). This is a publication from the
3 American Association of Blood Banks on 21 February 1986.
4 Go over the page, please.

5 We can see under the heading "FDA advisory panel
6 recommends surrogate testing for NANB".

7 We can see:

8 "The Blood Products Advisory Committee of the FDA
9 will recommend that both ALT and anti-core testing be
10 performed on donated blood to reduce the incidence of
11 transmission of non-A non-B Hepatitis through
12 transfusion. In February 13 to 14 meeting the panel
13 received reports on two studies showing that recipients
14 of blood from donors with elevated ALT and anti-core had
15 a higher incidence of NANB hepatitis. While questions
16 were raised about the data, it was noted that the
17 carrier of NANB is higher than previously thought and
18 that cases are underreported and that NANB is now
19 considered to be a much more serious disease."

20 Then three paragraphs down, please:

21 "The advisory panel makes its recommendations to FDA
22 staff; the recommendations are not binding at this
23 time."

24 So I think that's the start of the change in America
25 towards recommending surrogate testing of donors.

1 Then the next document, please, coming back to
2 Scotland, a meeting of the directors on 25 March 1986,
3 [\[SNF0010135\]](#), please.

4 We can see a meeting of the directors on that date.
5 And on the last page, please, at 0142, item 5,
6 "Surrogate testing for NANB", reference to the FDA's
7 recommendation:

8 "Dr Forrester of the SHHD said it was highly
9 unlikely that the UK departments of health would fund
10 testing based on data from the USA. Certainly
11 clinicians and haematologists in this country had felt
12 that the transfusion services had been slow to commence
13 AIDS antibody testing and others had similar views in
14 relation to non-A non-B Hepatitis surrogate tests.
15 Dr McClelland said he would be able to provide data
16 about raised ALT levels in blood donors by the autumn of
17 1986. Dr Forrester will be glad to hear of any research
18 but could not guarantee funding. After a full
19 discussion, the directors agreed to give consideration
20 to funding someone to undertake research. Dr Cash would
21 think about the possibilities in association with
22 Dr Fraser and make some proposals to the directors."

23 Dr McClelland, the reference to the study in
24 Edinburgh, we will come on to that later but essentially
25 I think it was restricted to a study of ALT levels and

1 donors --

2 A. It's a donor study, yes.

3 Q. What was your reaction at the time to the directors
4 would give consideration to funding someone to undertake
5 research? Can you remember?

6 A. I can't remember, but looking at the minutes, it sounds
7 like probably I didn't expect an awful lot of action.

8 Q. Why not?

9 A. Well, giving consideration to funding, it's pretty
10 vague, it doesn't look like a commitment to me but
11 I don't remember the discussion.

12 Q. Was there an element on your part perhaps of having been
13 there, seen it, done it, and got the teeshirt and trying
14 to provoke a study in this area?

15 A. We hadn't got any tee shirts. That was the very
16 frustrating. But I can't tell from the minute. There
17 is nothing there to indicate what kind of research was
18 envisaged, whether it was returning to some sort of
19 epidemiological study, as we had wanted to do, or
20 something else. I really don't know.

21 Q. This may be wrong but there is possibly a whiff, reading
22 this, of the matter appearing for the first time or
23 being considered for the first time, whereas, as far as
24 you are concerned, obviously, you had looked at this in
25 some detail way back in 1980, I think.

1 A. Yes. I mean, I had certainly discussed it -- and I'm
2 sure Dr Cash will say the same thing. It was at his
3 request that I had originally joined that, or he had
4 proposed me to be a member of that MRC working party,
5 and I certainly felt that I had his support in pursuing
6 the idea of a prospective study.

7 Q. I should perhaps have asked, doctor, when you attended
8 the meetings of the MRC working group and then later the
9 blood transfusion services working party on hepatitis,
10 did you report back to Dr Cash?

11 A. Yes.

12 Q. So Dr Cash knew at all times what you were doing, what
13 you were proposing?

14 A. Yes, I probably reported to him in writing. I usually
15 provided him with a note but I certainly would have
16 informed him of what was happening.

17 Q. Thank you. The next document, please, [\[DHF0021290\]](#). We
18 go south of the border to the English directors' meeting
19 on 24 and 25 April 1986. The name, suitably redacted,
20 but we can see SNBTS. Am I right in thinking
21 Professor Cash was usually the SNBTS representative at
22 these meetings?

23 A. Yes, I think so.

24 Q. Can we, please, go to page 7, which is 1296? Item 16:

25 "Should NBTS carry out a study on NANBH? The

1 chairman reported that this had been discussed with the
2 Scottish directors and that he had agreed to raise it
3 with RTDs. [Blank] reminded directors of two previous
4 attempts, one by the MRC and one by the
5 transfusion-associated hepatitis working party to study
6 this problem. After discussion it was agreed that this
7 should not be pursued because of lack of time and
8 resources."

9 So that's the initial view of the English directors
10 to the suggestion that the matter should be studied.

11 Could I then, please, go to document [\[SNB0024077\]](#)?
12 I simply mention this as a further step in the
13 chronology.

14 We had mentioned, doctor, the Edinburgh study of
15 donors, and I think this is a document setting out that
16 proposal. We don't see the date but we see a date stamp
17 of April 1986 and we see the document is entitled
18 "A proposal for a prospective study of blood donors with
19 abnormal liver function tests possibly indicating
20 carriage of non-A non-B Hepatitis."

21 And the authors are Dr Gillon, Dr Beckett and
22 yourself.

23 What was the purpose of this study, doctor, being
24 restricted to donors against the background that your
25 preferred study was the much larger-scale one, including

1 recipients?

2 A. Actually, I think part of the -- if you look at the body
3 of the study, there were actually two types of liver
4 enzyme tests being utilised in this study, ALT and
5 another one, which I'm ashamed to say I can't remember
6 at the moment.

7 Q. GST?

8 A. GST -- which was new and was the research interest of
9 Dr Beckett, and I suspect that the initiation of this
10 study was at least 50 per cent an attempt to establish
11 some more information about the relative significance of
12 these two enzymes in a fairly healthy population. It
13 didn't go anywhere to addressing the questions that we
14 had been interested in in the earlier proposals.

15 Q. Yes.

16 A. I honestly can't remember now what were the factors that
17 led us to feel this study was worth doing but I suspect
18 an interest in the other enzyme test was a significant
19 part of it --

20 Q. I think, out of fairness to you, doctor, that's
21 absolutely right. If we go to page 4083, headed,
22 "Background to the present study", I won't read it but
23 perhaps take a minute to read it, to satisfy yourself.
24 (Pause)?

25 A. Yes, I think this was probably what drove it and I think

1 that may well be why it got funded because this was
2 a novel test and that's always much easier to get
3 funding for than a bit of epidemiology.

4 Q. Thank you. The next document, please, is [\[SGH0016286\]](#),
5 the minutes of a Scottish directors meeting on
6 25 June 1986, please. Page 5, which is 6290, item (i),
7 "Surrogate testing":

8 "Increasing evidence that the USA and several
9 European countries were introducing anti HbC and/or ALT
10 testing ... Dr Cash believes that the SNBTS would soon
11 come under pressure from clinicians to introduce
12 testing."

13 Reference to the limited study at Edinburgh. And:

14 "Dr Fraser had advised Dr Cash that he (Dr Fraser)
15 and Dr Marcela Contreras (Edgware ...) were keen to set
16 up an small group to explore the feasibility and
17 practicability of this development and that it was their
18 hope that a Scottish RTC would contribute."

19 Then the next document, please, takes us to America
20 and the introduction of screening. It's an article from
21 Nature of 4 September 1986. It's [\[SGF0012108\]](#). We can
22 see the article, headed, "Hepatitis screening extended".
23 The first paragraph:

24 "Spurred by growing concern that non-A non-B
25 Hepatitis may represent a more serious health hazard

1 than previously thought, the AABB announced last week
2 that its members will begin screening all donated blood
3 for evidence of non-A non-B Hepatitis but, as AABB
4 officials are quick to acknowledge, such screening
5 leaves much to be desired, as no direct testing for
6 non-A non-B Hepatitis exists."

7 Then the third paragraph, lefthand column:

8 "The debate over whether to use one or both of these
9 tests to screen donated blood has been raging for
10 years."

11 The next paragraph:

12 "The American Red Cross is also implementing ALT
13 testing at its blood banks ... AABB expects to implement
14 testing ... by 30 November. A third organisation for
15 blood banks, the Council for Community Blood Centres ...
16 has not officially declared a position on ALT testing.
17 But its president ... says most members will go ahead
18 with ALT screening.

19 "Far more contentious is the use of anti HBc
20 screening."

21 Right-hand column, please, second paragraph down:

22 "Robert AuBuchon of the American Red Cross says the
23 Red Cross is planning to start an anti-HBc screening
24 programme of its own but not until after the ALT test is
25 implemented. Counts feels that the Food and Drug

1 Administration should play a larger role in certifying
2 the usefulness of anti-HBc."

3 In the second paragraph in the right-hand column:

4 "What everybody is hoping for is a direct test for
5 the agent ... but that seems a long way off. Several
6 candidates have been suggested but none has held up."

7 Last paragraph:

8 "A major concern for all blood centres will be the
9 loss of donors from false positives."

10 At the end:

11 "The AABB president ... says the tests are
12 'essential to increase the safety of the blood supply'."

13 That sets out the position in America. I take it,
14 doctor, that at some point you became aware in 1986 that
15 the American blood banks --

16 A. Yes, we knew exactly what they were doing.

17 Q. Could I then look at the next meeting of the English
18 directors, please? It's [\[SNB0113106\]](#). 8 October 1986.

19 Can we go to page 7, please, which is 3112, item 14,
20 "Anti-HBc and/or ALT testing". A few lines down we can
21 see:

22 "Developments in America meant that this topic must
23 be considered again, as anti-HBc/ALT was soon to be
24 essential for the accreditation of blood banks in the
25 USA. The chairman proposed that the RTDs should

1 approach the DHSS to fund a prospective study of 10,000
2 donations ..."

3 Over the page, please. The last sentence in this
4 paragraph. We can see:

5 "The introduction of anti-HBc/ALT screening seemed
6 very likely."

7 So really in a quite a short period -- the English
8 directors -- from the meeting in April 1986, when there
9 was no interest really in a study, to a meeting
10 in October 1986 and it being recorded, at least, that
11 the introduction of screening being very likely.

12 Did you have a view yourself at the time, doctor,
13 once the American blood banks had introduced the test --
14 did you have a view as to how likely it would be as to
15 whether the Scottish and UK Transfusion Service would
16 have to introduce the test?

17 A. I honestly can't remember but I'm sure I would have felt
18 at the time that the fact that the whole of the
19 United States had no option but to do this would have
20 influenced thinking in the UK. It would have been very
21 surprising if it didn't.

22 Q. I suppose the mere fact that the Americans have
23 introduced it, but also, secondly, I suppose, it would
24 provide an opportunity for working through the various
25 problems and objections which had been raised to the

1 screening. For example, the loss of innocent donors,
2 the effect on donors, how to counsel and that sort of
3 things, the Americans really would be forced to address
4 these problems and --

5 A. I do recall that we became aware very quickly that
6 particular the ALT testing was causing very considerable
7 problems for the American services, as we knew was
8 inevitable. But the fact is that they didn't fall over,
9 they didn't stop providing blood and it didn't cause
10 a crisis, but I think it probably caused a lot of stress
11 and probably cost a lot more than they expected it was
12 going to cost.

13 Q. Can you clarify a little what you mean by the problems
14 that were caused in America with ALT testing? What type
15 of problems?

16 A. There were the very obvious problems of loss of donors,
17 very obvious problems associated with deciding which
18 donors were to be informed and who was going to do that
19 and how it was going to be done and what was going to be
20 said to them, all very difficult questions, and then
21 what is not terribly obvious from the outside is the
22 extent to which in a very large -- you know, it's a mass
23 production operation and by that time parts of it were
24 quite heavily dependent on automated systems and
25 computers and things like that. But introducing a new

1 test and particularly one which requires a lot of
2 donations of blood to be taken, as it were, out of
3 circuit can destabilise the whole system and actually
4 creates a lot of -- something that's not really talked
5 about very much, but it creates a lot of new risks; it
6 increases the risk of other essential test results not
7 getting attached correctly to the donations and so on.
8 I don't think anybody measured this but I think I would
9 be quite confident that during the period of the
10 introduction of ALT testing many mistakes were made in
11 blood services where this was done, and some of them
12 undoubtedly would have compromised patients. There is
13 no free lunch.

14 Q. I see.

15 THE CHAIRMAN: Could you follow just a little bit, just to
16 see what the mechanics were that resulted in that? Did
17 the records get dislocated in some way from samples or
18 was there a breakdown in recording or what?

19 A. There is a myriad things that can go wrong, particularly
20 in a system which is partially automated, where you are
21 depending on, for example, manual procedures to withdraw
22 physical blood units and put them in a quarantine
23 position so that they don't get transfused once
24 a positive test result has come out and then to ensure
25 that those units are correctly disposed of and don't, as

1 a result of somebody going to the wrong refrigerator,
2 find their way back into the blood supply and so on.

3 There are infinite possibilities for anything that
4 causes a partially planned or an incompletely planned
5 change to the system to produce downstream problems.
6 That's not unique to blood transfusion; it occurs in
7 every large complex system.

8 THE CHAIRMAN: Yes. Thank you. I think just the more
9 procedures there are -- because of the number of
10 opportunities for things to go wrong.

11 A. If it is important, we could easily produce some very
12 specific examples of how complexity has contributed to
13 errors.

14 THE CHAIRMAN: I don't think I want to go into the whole
15 range of possibility, Dr McClelland, but just at this
16 moment to get a little bit of a feel for what it was
17 that created the risk of error, rather than to pursue
18 particular examples.

19 A. Yes.

20 MR MACKENZIE: Thank you, sir.

21 Dr McClelland, could I finally look, before lunch,
22 at another minute of the Scottish directors? It's
23 [\[SGF0010268\]](#). It's a meeting of 9 October 1986. If we
24 can go to page 0272, please, page 5, under little "(g)
25 Surrogate testing ... ":

1 "Dr Gunson reported that three English centres
2 (Edgware, Bristol/Manchester) were to study the
3 incidence of raised ALT and hepatitis core antibody
4 levels in their donor populations."

5 I think this is the start of the UK multi-centre
6 trial.

7 A. Yes.

8 Q. Looking at surrogate testing but only studying donors.
9 Is that correct?

10 A. That's correct, yes.

11 Q. "Dr Fraser indicated that it would be helpful if
12 an SNBTS centre could be concluded in the study."

13 Do you remember, Dr McClelland, what was your view
14 at the time of the usefulness of such a study?

15 A. I really don't remember, but I don't know that there are
16 any documents in which I committed myself to that.

17 I can't see how I would have thought it was going to
18 help very much. It did seem rather like a way of buying
19 time actually. It's an easy study to do because all
20 these donor samples are completely under the control of
21 the blood service. The only problem they have is to
22 actually do the tests and also to decide on what is
23 going to be done in terms of are donors going to be
24 informed that these extra tests are being done and so
25 on. But it's relatively very, very quick, easy and

1 inexpensive to do a large study of this sort on donors.
2 Moving to doing a study on patients, that requires them
3 to be followed up and have repeated samples taken after
4 they leave hospital is orders of magnitude more
5 difficult.

6 Q. I think later in your statement you refer to this study
7 as essentially being an irrelevance if one wants to
8 assess the efficacy of surrogate testing in reducing the
9 incidence of post-transfusion non-A non-B Hepatitis?

10 A. That sounds rather rudely dismissive but I think it's
11 true.

12 Q. It seems true as a matter of logic, I think.

13 A. Yes.

14 Q. How can one properly assess the efficacy of surrogate
15 testing without studying the recipients?

16 A. I agree.

17 PROFESSOR JAMES: The only use of that study would have,
18 presumably, been to see how much blood would have to be
19 put aside because it failed those tests.

20 A. Absolutely, yes. It has a utility in that respect.

21 PROFESSOR JAMES: Sort of a financial management-type of
22 utility but not much else.

23 A. We already had quite a lot of information about
24 prevalence in donors and I am not aware of any reasons
25 why it should have changed dramatically in this

1 relatively short time period.

2 MR MACKENZIE: Finally before we break, if I may, can we
3 also see reference in the minutes to it being agreed
4 that:

5 " ... the UK Working Party in Transfusion-Associated
6 Hepatitis was the most appropriate body to pursue the
7 issue of implementing surrogate testing and Dr Cash
8 would write to Dr Gunson formally requesting that this
9 working party be reconvened with a view to make
10 proposals to the Department of Health."

11 The note says:

12 "The UK working party last met in 1981."

13 I think that's inaccurate. I think it was 1983, the
14 last meeting.

15 A. Yes.

16 MR MACKENZIE: Thank you. That may be an appropriate point
17 to adjourn.

18 (1.05 pm)

19 (The short adjournment)

20 (2.00 pm)

21 MR MACKENZIE: Doctor, before we look at events in late
22 1986, there was one paper from 1983 that I did mean to
23 put to you earlier. Could we go to that please? It's
24 [\[LIT0011837\]](#).

25 I think you will recognise this as being

1 Vox Sanguinis' publication and we can see the title in
2 short, the question was asked:

3 "Based on your analysis of the benefits and costs
4 the pros and cons of surrogate testing, would you
5 recommend it?"

6 I think, Dr McClelland, your response is at page 57,
7 1846. We can see top left-hand corner your name,
8 doctor. I think in short your position is that you
9 recommended proper research first rather than a rush to
10 introduce surrogate testing.

11 A. Yes.

12 Q. We see you say:

13 "The only action which I would recommend at present
14 is that there shall be a thorough prospective study to
15 determine the frequency with which post-transfusion
16 hepatitis occurs in the regions served by this centre or
17 in a closely comparable population.

18 "If the results of such a study indicate that
19 post-transfusion hepatitis due to non-A non-B viruses
20 (PTH) occurs sufficiently frequently to causes concern,
21 I would recommend further study be carried out to
22 determine whether the introduction of a donor ALT
23 screening programme does in fact reduce the attack rate
24 for PTH. As an alternative it may well be possible to
25 estimate simultaneously the attack rate for PTH in the

1 recipients of ALT screened or non-screened blood."

2 Is that essentially consistent with what you were
3 proposing at the time?

4 A. Yes. Oh, yes, absolutely.

5 Q. You say that:

6 "I consider that without undertaking thorough
7 studies along these lines, the potential and actual
8 scale of the benefit side of the cost benefit
9 calculation is unknown and therefore no rational
10 decisions can be taken."

11 Finally:

12 "I would therefore recommend that we are careful to
13 establish the benefits before we become committed to the
14 costs. We must know what improvement in the quality of
15 our blood and blood products we are asking the community
16 to pay for."

17 I think, as we will come to see shortly, doctor,
18 I should say this passage was written at a time
19 obviously when a proper prospective study remained
20 a live issue in the UK.

21 A. Well, yes.

22 Q. But things were to change, as we will come on to see
23 very shortly. So that's that paper.

24 Then could I, please, revert to events in late 1986,
25 which I can pick up, please, at the bottom of page 10 of

1 your statement, 0763. In paragraph 1.8 -- so we are now
2 talking about the reconvening of the UK Blood
3 Transfusion Service's working party on
4 transfusion-associated hepatitis and a meeting on
5 24 November 1986. We haven't been able to find or
6 recover minutes of this meeting.

7 A. I am aware of that.

8 Q. Doctor, I think you have provided us with your
9 handwritten notes of part of the meeting and we also
10 have a typed-up note from Dr Forrester of the SHHD, and
11 we will consider each in turn, but sticking with your
12 statement, you say you missed the first part of the
13 meeting due to travel delays. You have your own
14 contemporaneous notes for the second part of the meeting
15 but have been unable to locate the minutes:

16 "A working paper had been prepared for the meeting
17 by Dr Gunson and is informative. I have reproduced
18 below part of the text that details the matters that
19 Dr Gunson proposed for consideration at the meeting,
20 following his review of the literature from the USA and
21 the UK."

22 Over the page, please, this is an extract from
23 Dr Gunson's paper. I'm not going to go to his paper.
24 I'll give the reference number for the record. It's
25 [\[PEN0170806\]](#).

1 You set out an extract from it:

2 "Incidents of transfusion-associated NANB hepatitis
3 in the UK. The best estimate of incidents from
4 published data is 3 per cent."

5 Et cetera:

6 "2. Projected value of ALT and anti-HBc screening
7 in prevention of transfusion-associated NANB hepatitis.

8 "If 30 to 40 per cent of NANB hepatitis could be
9 prevented by the use of the above tests, then the
10 reduction in the number of cases would be 6750-900 per
11 year and by extrapolations; 670-900 cases of cirrhosis."

12 You point out there is a typographical error, when
13 it states that "the reduction in the number of cases
14 would be 6750-900 per year", the 900 should be 9,000?

15 A. Yes.

16 Q. And then Dr Gunson went on:

17 "Some qualifications should be made to 1 and 2
18 above:

19 "(a) the course of chronic disease in NANB
20 hepatitis is mild and therefore many cases probably
21 remain undiagnosed even with cirrhotic changes occur.
22 This, I feel, is why we have not been aware of what
23 appear to be quite serious statistics."

24 Et cetera:

25 "(d) one must question ... whether the incidence of

1 transfusion-associated NANB hepatitis is as high now as
2 the estimates suggest.

3 "3. Effective ALT and anti-HBc screening and blood
4 collection from the evidence available in the UK, one
5 might expect that ALT screening will cause the loss of
6 .07 to .09 per cent of donations and anti-HBc in order
7 of 1 per cent. Presumably there will be some overlap in
8 the ALT and anti-HBc results but one might expect a loss
9 of donations of approximately 1.5-1.75 per cent."

10 There is a quantity later in your statement,
11 I think, that is probably an underestimate if both tests
12 had been introduced, we may have been looking at loss of
13 donations in the order of perhaps 4/4.5 per cent?

14 A. Yes.

15 Q. We will come back to that. In your statement you go on
16 to say that:

17 "Despite the estimate that a substantial reduction
18 in NANBPTH could result from the introduction of
19 surrogate testing the committee did not proceed to
20 recommend that it be introduced. Instead a multi-centre
21 study of surrogate markers in blood donors was
22 proposed."

23 We will come on to that.

24 As I say, we haven't been able to recover the
25 minutes for the meeting on 24 November 1986.

1 We do have, doctor, your handwritten notes which are
2 [\[PEN0171540\]](#). They run to one and a half pages, doctor.
3 I don't propose taking anything from these notes or
4 putting anything to you.

5 Is there anything you feel we ought to know from the
6 notes?

7 THE CHAIRMAN: That's putting a terrible burden to
8 Dr McClelland.

9 A. These ones I have seen them before recently.

10 THE CHAIRMAN: Not only has he to read them but he's got to
11 decide on the --

12 A. I don't think there is anything material here that
13 doesn't come out in the statement actually. I think the
14 Inquiry team did ask me to send any notes that I had.
15 So I did so.

16 MR MACKENZIE: I think, with no disrespect, perhaps of more
17 assistance to us would be Dr Forrester's note of the
18 whole meeting, and that's SGH0028137. If nothing
19 else, it's more legible.

20 It may be a different number. Can we try perhaps
21 [\[PEN0171554\]](#). I apologise.

22 If we go on to the next page, we will see that this
23 note was produced by Dr Forrester on 1 December 1986.
24 We see that there.

25 Back to the first page, please. It's a note from

1 Dr Forrester to Dr McIntyre of the SHHD, copied to
2 Dr Scott and Mr Murray. Dr Forrester explains in the
3 first paragraph that:

4 "This working party was established in 1981 and has
5 been inactive for some time ... it was convened on
6 24 November 1986 to discuss screening of blood donations
7 for ALT ... and anti-HBc."

8 There is reference in the next paragraph to
9 Dr Gunson's written presentation, and then Dr Forrester
10 says:

11 "They considered the following issues:

12 "1. Is the American experience of frequent non-A
13 non-B Hepatitis in the recipients of blood and blood
14 products reproduced here? If so, a 40 per cent
15 reduction in it would follow the screening. The answer
16 is no. Such evidence as exists does not bear out the
17 American experience but to examine the question properly
18 would be a long on the expensive business."

19 Do you agree with that, doctor?

20 A. Oh, yes. I mean, there is no doubt that the sort of
21 study that would have been required to do this would
22 have been expensive, complex and taken several years.

23 Q. There would have to have been sufficient will and
24 resources?

25 A. Oh, yes. Quite a lot of both.

1 Q. Yes. Both of which I think you found lacking from our
2 discussion this morning?

3 A. Well, the will was lacking and the resources would only
4 follow.

5 Q. Paragraph 2 here:

6 "Is ALT screening the application of
7 a straightforward yes/no test? The answer is no, it is
8 an arbitrary decision on where to draw the line ...
9 Dr McClelland put the proportion of local donations
10 showing an ALT test in excess of 45IU (a credible place
11 for the line) at 34/1008 ie 3.4 per cent. The
12 proportion excluded by Hepatitis B core antibody
13 screening is put at 1 to 1.8 per cent ... It is clear
14 that much innocent blood would be excluded."

15 I think already from the discussion in the meeting
16 perhaps a more realistic estimate of the percentage of
17 donations which would be excluded and we saw in
18 Dr Gunson's paper.

19 Paragraph 3:

20 "Will better solutions emerge?"

21 No response to that really:

22 "4. Is research indicated? The meeting felt that
23 a prospective study to discover the present burden of
24 transfusion-associated non-A non-B Hepatitis was
25 impracticable on grounds of cost and huge sample size."

1 Would that have been your view at the time, doctor?

2 A. No.

3 Q. Would your view have remained as at the 1983 meetings?

4 A. Yes, at this stage absolutely.

5 Q. Do you have any recollection of this meeting, doctor?

6 A. Well, not really, no. I do know I missed -- there was
7 weather problems and I arrived late. No, I clearly was
8 there because I made notes but I really don't remember
9 the meeting.

10 Q. Okay:

11 "... and they proposed instead a study to identify
12 in three centres (one Scottish) donors positive for ALT
13 or core antibodies and search for other risk factors in
14 them."

15 This is again a reference to the UK multi-centre
16 study involving only donors rather than recipients.
17 Does that seem reasonable?

18 A. The statement is reasonable, yes.

19 Q. Over the page, of interest, I think, paragraph 3:

20 "There was some discussion of the cost of screening
21 all donations (perhaps £8 million). I asked the
22 chairman ..."

23 Dr Gunson:

24 "... when he would advise screening if it were free
25 of cost. He said no."

1 What would your reply to that question have been at
2 the time, doctor?

3 A. I have no recollection of this. It's a most
4 extraordinary line. It really is. I think my --
5 1986 -- I think by 1986 my view probably would have been
6 that, you know, being aware of what was going on in the
7 United States and so on, the fact that they had
8 reluctantly concluded that the evidence was sufficiently
9 strong that they had little option but to introduce
10 screening, my answer to this would have been, yes.

11 Q. And then the last paragraph:

12 "The position explicitly reached at the meeting is
13 to recommend research of no great significance or
14 scientific interest because the prospect of research
15 would serve to counter pressure from, for example,
16 haemophiliacs and haemophilia directors, to embark on an
17 indirect and largely infective form of screening, which
18 would also lose us a certain amount of perfectly
19 harmless blood."

20 Do you have any comment on that passage?

21 A. I think it's -- I agree with the dismissal of the
22 further study on prevalence in donors, which we have
23 already discussed. I have absolutely no -- as I say,
24 I do not recall the meeting. I do think this is
25 a things of John Forrester's. I don't think -- that's

1 very uncharacteristic, it's not the sort of discussion
2 that would have taken place typically at this sort of
3 meeting, I don't think to just say cynically we will do
4 some research to shut people up. When I read this, when
5 I first saw this document fairly recently, I was really
6 quite surprised by that actually.

7 Q. So you would disassociate yourself with the second part
8 of that passage but perhaps agree with the first part,
9 namely that the research was of no great significance or
10 scientific interest?

11 A. I don't think it would have added very much to our
12 ability to make a rational decision on what to do.

13 Q. For the reasons we discussed this morning?

14 A. For the reasons we have already discussed.

15 Q. Thank you.

16 PROFESSOR JAMES: Sorry, before we leave, could I just ask
17 about the second part of that last paragraph, which
18 seems very odd, and I don't know where Dr Forrester can
19 have got what was patently extremely false information,
20 which says:

21 "Figures were produced for the total number of non-A
22 non-B cases encountered annually among haemophiliacs."

23 We know that virtually every haemophiliac was
24 affected by non-A non-B Hepatitis. So that seems a very
25 curious misapprehension and, of course, it may have

1 informed his and hence other people's views in a very
2 unfortunate way. Do you know where that might have come
3 from?

4 A. I don't. I know where it might well have come from, but
5 without the minutes of the meeting we don't actually
6 know who was present at the meeting, I don't think. The
7 person who was most au fait with this information and
8 responsible for generating a lot of it was
9 Dr John Craske from the Public Health Laboratory
10 Service, but John Craske knew what he was talking about
11 and would not have made a statement like this. I think
12 this must be a -- not a misrepresentation but
13 a misunderstanding of what was said at the meeting.

14 PROFESSOR JAMES: Yes, I agree, thank you.

15 MR MACKENZIE: And again, thank you, it's speculation but
16 one perhaps has to bear in mind a number of reported
17 cases of non-A non-B Hepatitis and perhaps the number of
18 actual cases. They may be two very different things.

19 A. Oh, absolutely, yes.

20 Q. I would like to, doctor, just again put your statement
21 to one side, please, and continue to look at a number of
22 other documents which just follow things
23 chronologically. 1987.

24 The next document, very briefly, please, is
25 [\[PEN0170814\]](#). You will see this is the document setting

1 out the proposals for the multi-centre study, and I see,
2 doctor, you are listed, obviously, as within the members
3 of this committee. Does that mean that you supported
4 this multi-centre study or you were neutral or against
5 it or what?

6 A. Yes, I was quite surprised to see my name on the front
7 page of this study. I really don't remember. I don't
8 think I was very interested in it actually. I think it
9 just sort of seemed to be something that was going to be
10 done for whatever reason, and I wasn't particularly
11 against it but I didn't -- I certainly can't imagine
12 that I would see much value in it.

13 But there is some other correspondence with the --
14 the Scottish Home and Health Department about
15 applications for funding for this. I have really tried
16 very hard to remember where I stood in relationship to
17 this study and I can't.

18 Q. Yes. Certainly, you were a member of a committee which
19 proposed this study and, as you say, in due course, you,
20 I think, and Dr Gillon jointly applied for money for
21 a research application for the Scottish leg of the
22 study. So to some extent, I assume you were supportive
23 of this study, albeit it wasn't the study you really
24 wanted to carry out?

25 A. That's the only conclusion I can draw.

1 Q. The next document, please, is an important one. It's
2 a meeting of the SNBTS directors on 3 March 1987. It's
3 [\[SGH0016653\]](#). Can we go to page 5, please?

4 At the bottom of page 5, reference to the UK working
5 party in transfusion-associated hepatitis had been
6 reconvened to pursue the issue of surrogate testing:

7 "A proposal for a study which would include the
8 Glasgow and Edinburgh centres had been modified and no
9 Scottish centre was now being asked to participate."

10 Over the page, please:

11 "It was noted that some commercial plasma collectors
12 and non-profit blood collectors in the US had begun
13 surrogate testing in 1987 and that in Britain the
14 Haemophilia Society may adopt a position which put
15 pressure on BPL to ensure surrogate testing was
16 introduced:

17 "The doctors discussed the options open to Scotland
18 and agreed the following."

19 I should have paused, doctor, do you have any
20 recollection of this meeting?

21 A. I don't.

22 Q. Then to return to the minutes, they say:

23 "To recommend to the SHHD that surrogate testing for
24 NANB should be implemented with effect from 1 April 1988
25 as a national development requiring strictly new

1 funding."

2 Et cetera.

3 Do you remember, doctor, why the directors made that
4 recommendation at that time?

5 A. Certainly not clear from the minutes. It just sort of
6 appears out of the blue. I think it must have been
7 primarily motivated by the awareness of what was going
8 on in the United States.

9 I can't think of any other factor that would have
10 sort of produced that decision at that sort of time.
11 It's very surprising that none of that is minuted.
12 I mean, there was a separate issue, which alluded to in
13 the paragraph above, which is the testing, specifically
14 in relation to plasma for the manufacture of Factor VIII
15 and other plasma derivatives, and that was a separate
16 theme that appears in the correspondence from time to
17 time, but it's really quite a different issue.

18 Q. Yes.

19 A. Although it impacts, of course on -- because if you are
20 going on test blood donations -- if you are going to
21 test -- have plasma that has been tested, ALT tested,
22 shall we say, before fractionation, then, as
23 a by-product of that you have those results for the
24 donation from which that plasma came, but I think it's
25 important to separate the implications of the two

1 questions.

2 Q. Can you help us, doctor, with who is likely to have led
3 this recommendation for the discussion on this topic?

4 On the face of it, it seems slightly odd, as you say,
5 for this just to appear out of the blue in the minutes.

6 It's a fairly strong and clear recommendation. Can you
7 remember which, if any, of the directors were pro
8 surrogate testing or more pro than others?

9 A. My recollection is that there wasn't much enthusiasm
10 among the Scottish directors. I mean, it may have been
11 me, I don't know. I really do not remember. I was very
12 surprised to see the clarity of this recommendation,
13 amidst all the other fudges.

14 Q. What do you mean by "all the other fudges"?

15 A. We have already looked at several examples today of
16 minuted commitments to go and investigate or set up
17 a committee or await somebody's discussion was somebody
18 else, which this looks more likely a call for actually
19 doing something.

20 Q. The next document in the chronology, please, is
21 [\[SNB0113548\]](#). We will see it's a letter from Dr Cash to
22 yourself of 30 March 1987. I'm sorry, I have jumped the
23 gun slightly. The preceding document is [\[SNB0113548\]](#).
24 I apologise. This is the correct document. I think the
25 document manager actually corrected my mistake for me.

1 So this is a letter from Dr Cash to Dr Gillon of
2 30 March 1987 and obviously Dr Gillon has produced
3 a draft article, a manuscript, following his study on
4 ALT anti-HBc testing.

5 A. Yes.

6 Q. Dr Cash enjoyed the draft but, paragraph 4, he had one
7 major worry, the final conclusion, I think in short, we
8 will come to see Dr Gillon didn't recommend the
9 introduction of surrogate testing on the information
10 available, and as Dr Cash states in the letter:

11 "My problem is that it runs quite contrary to the
12 decision made by the SNBTS directors (to seek funds to
13 establish routine testing in mid 1988). The proposal,
14 to which the directors agreed, was made by one of the
15 co-authors of your paper."

16 Yourself, Dr McClelland. Do you have any
17 recollection of this?

18 A. Yes, I remember this very well. It may also remind me
19 of part of the answer to your previous question about
20 that minute, if we can go back to that in a moment.
21 Yes, the study which we have already alluded to, the
22 blood donors study, had been really driven by Dr Gillon
23 and Dr Beckett of clinical chemistry and I think had
24 been an author, my name had been on the original
25 application but I had had very little to do with the

1 study. So when they produced the draft, the first draft
2 of the paper for publication, they very decently left my
3 name on it, although I hadn't done very much.

4 Very shortly before that, if my time sequence is
5 correct, I had drafted a letter, which all the
6 transfusion directors signed, which appeared in the BMJ
7 or the Lancet and that, I think, is linked to the
8 decision that was minuted that we just looked at and
9 that letter was saying really, "We have got to get off
10 the pan and just start doing testing", for a specified
11 number of reasons for expressing that view and, of
12 course, Jack's paper, concluded on the basis of the
13 donor study that testing wouldn't help.

14 It wasn't actually a totally sound conclusion, for
15 all the reasons we have discussed in the morning,
16 because it didn't look at patients. It just purports to
17 explain the fact that there were lots of reasons for
18 these donors as being elevated ALT tests but it didn't
19 exclude the possibility that they actually had
20 hepatitis.

21 So it was an embarrassing situation. I just took my
22 name off other paper because I hadn't done anything
23 about it anyway, and it was noted, you know, that the
24 SNBTS appeared to be facing in several different
25 directions about this. It actually didn't worry me very

1 much because I felt it was a matter that was highly
2 controversial and there was nothing particularly wrong
3 with having a lively debate in the organisation. Not
4 everybody felt that way about it.

5 Q. We will go on just to look at the chronology. The next
6 item is [\[SNB0060676\]](#). This is a letter of the same
7 date, 30 March 1987, from Dr Cash to yourself,
8 Dr McClelland.

9 Dr Cash states:

10 "I feel, as a matter of some urgency, we need to
11 have a chat -- either about modifying the conclusions of
12 the paper or reversing the directors' meeting decision.
13 Both options are likely to be painful."

14 Your response, doctor, is [\[SNB0060715\]](#). A memo by
15 yourself, doctor, to Professor Cash, 15 April 1987, and
16 then you say:

17 "Yes, there is undoubtedly a problem of facing in
18 both directions.

19 "The obvious difficulty is that on commercial
20 competitive grounds we need to introduce screening but
21 on scientific and value for money for the health service
22 grounds, we should be opposing it. I don't know if
23 there is any way out of the dilemma. I am happy to
24 remove my name from the paper but I don't really think
25 that would solve anything."

1 I think what in fact happened was I think you did
2 remove your name from --

3 A. I took my name off the paper.

4 Q. Yes. Then I think the next contribution in this debate
5 comes from Edgware, if we can go, please, to
6 [\[LIT0011854\]](#). That is a letter in The Lancet dated
7 18 April 1987 from Dr Anderson and others from the North
8 London Blood Transfusion Centre on the question of
9 surrogate testing for NANBH.

10 In the left-hand column about half way down, the
11 paragraph commencing:

12 "We collect more than 190,000 units of blood per
13 annum and reports of post-transfusion hepatitis are
14 received from hospitals and investigated to try and
15 identify the type of hepatitis and its source. Since
16 1974 the number of cases reported has been 3-9 per
17 annum, most being attributed to Hepatitis B virus. No
18 association has been reported between cirrhosis and
19 previous blood transfusion, nor do we have evidence in
20 the UK of a high prevalence of post-transfusion NANB
21 hepatitis or its severe clinical sequelae."

22 In the right-hand column the authors state:

23 "The above data raise the following questions:

24 "1. Is there any evidence that the incidence of
25 post-transfusion NANB hepatitis in the UK is similar to

1 that in the USA?"

2 Other questions.

3 They say, the second last paragraph:

4 "Before we are forced to accept two screening tests
5 of unproven benefit, which have high revenue
6 implications, we need a national study to assess the
7 incidence of raised ALT and anti-HBc in donors in
8 different part of the country. Also, and perhaps more
9 importantly, a study is needed to assess the incidence
10 of acute post-transfusion NANB hepatitis and to assess
11 how many of those affected develop evidence of
12 chronicity and serious clinical sequelae:

13 "If the true incidence of post-transfusion NANB
14 hepatitis and its serious clinical sequelae are at
15 a much lower level than reported from the USA, then be
16 screening of donations to reduce the incidence of NANB
17 hepatitis may not be cost-effective in the UK."

18 Do you remember seeing this letter, doctor?

19 A. Oh, yes.

20 Q. What was your reaction or response?

21 A. Well, Dr Contreras was basically saying we still need
22 a prospective study and then she went on and did it on
23 a relatively small scale, and we referred to it this
24 morning, and got the answer that she was hoping for,
25 which was that it was a non-problem. It wasn't

1 interpreted as a non-problem.

2 Q. But at the time in April 1987 what was your response to
3 the suggestion that a prospective study was needed
4 rather than introduction of the tests?

5 A. Well, I honestly can't remember. I mean, I think I was
6 in one sense probably glad that somebody was saying what
7 I had been trying to say for quite a long time but at
8 the same time, I mean, I was aware that the study would
9 take several years and I think I would probably have
10 felt it was a bit late and in fact the study that was
11 started was not -- I think was not completed until after
12 Hepatitis C testing had actually begun.

13 So we were running -- I mean, I didn't obviously
14 know at this time that Hepatitis C -- a test was going
15 to be become available at the end of 1989 or early 1990
16 but I felt that we had been prevaricating about this for
17 a long time, and to sort of prevaricate for another
18 three years, which was which was the minimum time it
19 would have taken to do a decent prospective study, we
20 were too late, and I think that was the burden of the
21 letter that was signed by the Scottish transfusion
22 directors.

23 Q. We are almost at that letter. The next document is
24 [\[SGF0010127\]](#). This is a meeting of the SNBTS directors
25 on 10 June 1987.

1 If we can go to page 6, please, which is 0132, item
2 g, "Surrogate testing":

3 "It was confirmed that the minute of the previous
4 meeting was incorrect and that the Edinburgh centre was
5 contributing to this study."

6 Then:

7 "Directors noted the need for synchrony with England
8 and Wales."

9 What was your position at the time, doctor? Did you
10 consider Scotland could introduce surrogate testing by
11 itself or did you consider that any such testing could
12 or should only be done in conjunction with the English
13 transfusion service?

14 A. I think I accepted that ultimately we had absolutely no
15 option but to proceed -- we could proceed with something
16 as costly as this only with the support of the Scottish
17 Home and Health Department because we were accountable
18 to them for the expenditure of public money. So we
19 couldn't just sort of stand back, "I'm a doctor" and
20 start testing. So we had to have their support.

21 That's a very different question to did I think that
22 we had to do the same thing as England. I'm sure my
23 feeling at the time was that there were many obvious
24 advantages to having a coordinated approach through the
25 United Kingdom but if it meant that something that

1 I believe was really important for patient safety was
2 not going to be done, as it were, on my patch, I would
3 give that a higher priority than, you know, keeping
4 things tidy and avoiding problems of cross-donor
5 differences in practice.

6 Q. At the time, so in the summer of 1987, would you have
7 put the issue of surrogate testing into that category
8 where you felt so strongly about it that you would have
9 been prepared to recommend its introduction in Scotland,
10 even if the English directors had no plans to do the
11 same?

12 A. Oh, yes, I wouldn't have had any compunction about that
13 at all.

14 Q. But you would have sought the support of the government,
15 the SHHD?

16 A. Yes, basically, if I, as an individual director, had
17 tried to make an UDI and spent money that I did not
18 have, I would have very appropriately have been given
19 the sack or disciplined or something. There were
20 certain rules about the expenditure of public money and
21 ultimately, you know, one accepted that one broadly
22 speaking had to comply with them.

23 Q. So who did you consider was ultimately responsible for
24 whether surrogate testing should be introduced in
25 Scotland?

1 A. I think the decision probably rested with the -- it
2 would have been the Scottish minister responsible for
3 health, ultimately, as it were, delegated down the line
4 through the department and the Common Services Agency,
5 which was the channel through which our funding arose.
6 But I think that's every simplistic. I think the
7 minister would inevitably be heavily dependent on the
8 burden of the advice that he or she was given, and if
9 there was very strong, clear, consistent, well-argued
10 and rational advice coming from, say, the clinical and
11 scientific community through the Home and Health
12 Department to the minister, I find it hard to believe
13 that most ministers would not have acted according to
14 it. And it's perfectly clear that the advice that was,
15 as it were, coming from the relevant professional
16 community was not clear and consistent.

17 Q. On that very topic, the next item I would like to look
18 at, please, is [\[LIT0010346\]](#). We will see these are
19 letters in The Lancet of 13 June 1987 from Dr Gillon and
20 Dr Dow in Glasgow on the question of surrogate testing,
21 and in short these doctors were not recommending the
22 introduction of surrogate testing at that time based on
23 the information available.

24 We will see, left-hand column is headed "Non-A non-B
25 Hepatitis surrogate testing of blood donations."

1 We can see this is a letter from Drs Dow, Mitchell
2 and Follett from Glasgow and West of Scotland Blood
3 Transfusion Service.

4 The second paragraph, left-hand column:

5 "Like Dr Anderson and colleague ..."

6 In Edgware:

7 "... we have found a very low incidence of reported
8 cases of post-transfusion NANB hepatitis in West
9 Scotland with only 23 case in the past eight years,
10 a period when over 800,000 units of blood have been
11 transfused."

12 Down a little bit:

13 "Thus if ALT and anti-HBc tests had been done
14 routinely for the past eight years at an estimated cost
15 of more than £1 million, and with a loss of around
16 4 per cent of the blood supply, only five of the
17 reported cases might have been prevented. That
18 presupposes that the donors with surrogate markers were
19 indeed the source of NANB infection."

20 The final paragraph:

21 "It would be prudent to do a UK study to assess the
22 real incidence of acute post-transfusion NANB hepatitis
23 and to assess the proportion of those chronically
24 affected, before considering following the American
25 surrogate testing policy."

1 Presumably, doctor, by this stage you are getting
2 a sense of deja vu when you read a recommendation that
3 it would be prudent to do a UK study to assess the real
4 incidence?

5 A. Yes.

6 Q. Then the other letter, if we go over the page, please,
7 this is the one from Edinburgh, Dr Gillon, and
8 colleagues. I'm not going to read the details of what
9 they say in terms of reporting their findings but,
10 again, the top of the left-hand column, page 2, we see
11 that the authors state:

12 "We conclude that the introduction of ALT anti-HBc
13 screening tests, an indicator of non-A non-B hepatitis
14 carrier status in blood donors cannot at present be
15 justified."

16 So that's that.

17 The next item, please -- I think we now come to the
18 letter you drafted -- is [\[SNB0040672\]](#). These are the
19 minutes of an extra meeting of the coordinating group of
20 the SNBTS. What was the coordinating group?

21 A. There were two -- there were essentially two sets of
22 meetings which were a very closely similar group of
23 people attended, one was called the board and the other
24 was called the coordinating group, and that one was the
25 coordinating group was supposed to sort of concentrate

1 on sort of medical and scientific-type matters, and the
2 board was supposed to be more managerial, administrative
3 matters. In practice, because it was the same people
4 meeting around the same table, things got a bit blurred
5 most the time.

6 Q. Thank you. Page 3, please, of these minutes.

7 Paragraph 5. Again we see "Testing blood donors for
8 non-A non-B Hepatitis."

9 The minutes state:

10 "Dr Brian McClelland tabled a draft letter to The
11 Lancet in expansion of the SNBTS view of the need to
12 commence surrogate marker screening of the blood
13 donations for NANB in the context of product liability
14 and of competition from commercial producers who would
15 be introducing it. Certain SNBTS staff had already
16 written to The Lancet that surrogate testing was not
17 justified on scientific grounds and the directors
18 acknowledged this.

19 "It was known that the United States had declared
20 blood transfusion to be a service, not a product, thus
21 escaping product liability. Dr Cash had done his best
22 to persuade the UK departments to follow suit but they
23 were not willing to apply for exemption from EEC
24 legislation.

25 "After a few editing points were made, each director

1 signed a amended copy of the letter which Dr Cash would
2 submit for publication."

3 So it appears, doctor, that you were the author of
4 the letter we will shortly come to and really no major
5 revisions were made to your draft.

6 A. As I recall, very little revision.

7 Q. Do you recall at this meeting or at about the time of
8 this meeting how strongly the various SNBTS directors
9 felt about the issue of surrogate testing?

10 A. I think most of the them were still pretty lukewarm
11 about it. I mean, as you can see, quite a number of
12 them had put their names to letters saying we shouldn't
13 do it, one at least of whom actually signed this letter
14 as well, which was interesting. But I don't think they
15 were enthusiastic. I think the thing -- and part of the
16 reason why -- we can come back and look at the letter,
17 but having repeatedly failed to get anywhere with -- on
18 grounds of patient safety, you know, I thought it might
19 be worth deploying some other arguments, because people
20 were worried about this new -- it was the European
21 directive on strict product liability, which was about
22 to be translated into the Consumer Protection Act, and
23 that was quite exercising people in the transfusion
24 service at this sort of time.

25 Q. Thank you. So we now, finally with that long build-up,

1 come to the letter, please, it's [\[LIT0010328\]](#). This is
2 the letter published in The Lancet on 4 July 1987 and we
3 can see over the next page, please, in the right-hand
4 column at the top, please, it's signed by all of the
5 Scottish directors, including Dr Perry, and your name is
6 stated first, Dr McClelland, presumably reflecting the
7 fact that you were the lead author of the letter?

8 A. Yes, I assume that's -- I'm not sure what The Lancet's
9 convention is but I imagine -- it's not alphabetical so
10 it must mean that.

11 Q. Professor Cash, I think, was going to send the letter to
12 The Lancet. It may be that he put your name first,
13 I don't know.

14 A. That's why I'm hesitating --

15 Q. We can always ask him tomorrow.

16 A. -- because I'm not sure what exactly was submitted.

17 Q. You can take the fact from those down south. So we can
18 see the title is quite striking, I think "Testing of
19 blood donors for non-A non-B Hepatitis", irrational
20 perhaps but inescapable in the text of the letter --
21 sorry, we are back on page 1, I'm sorry.

22 We can see the first paragraph in three letters in
23 The Lancet:

24 "Dr Anderson, Dr Gillon and Dr Dow and their
25 colleagues point out weaknesses in the arguments which

1 have been used to sport introduction of blood donor
2 screening to reduce transfusion-transmitted non-A non-B
3 Hepatitis using ALT and anti-HBc as surrogate markers,
4 while three letters suggest the use of UK transfusion
5 services should not start donor screening until
6 prospective controlled studies have been done in the UK
7 to find out how many cases of post-transfusion hepatitis
8 would be prevented. No large study to answer this
9 critical question has yet been presented and we agree
10 that the size of the benefit to be gained from surrogate
11 testing cannot be accurately established without such
12 a study. However, the time for this study has already
13 passed. Starting now will give us an answer in three to
14 four years -- and that is probably three to four years
15 too late. The introduction of surrogate marker testing
16 for NANBH just now is virtually inescapable for three
17 reasons:

18 "1, in 1988 European legislation on strict product
19 liability comes into force in the UK. If harm should
20 come to the recipient of a therapeutic product the
21 producer will be held liable unless he can demonstrate
22 that he used all known methods and information to avoid
23 the risk."

24 Et cetera.

25 Then 2, the question of pooled plasma fractions:

1 "Even if surrogate marker screening would only
2 modestly reduce the level of infectivity in these
3 products, many would argue that some improvement is
4 better than none."

5 Thirdly:

6 "The UK blood transfusion services, although the
7 major suppliers of blood and blood products in this
8 country, cannot afford to ignore the wishes of consumers
9 to be supplied with non-A non-B tested products, even if
10 it is believed that the real benefit in safety which is
11 offered to the patient is marginal."

12 Then the question of -- the letter goes on to look
13 at the assumption that surrogate marker testing was
14 necessarily a bad buy in comparison with other tests.

15 And the top of the second column, please, the
16 authors conclude:

17 "Looking at these three factors -- producer's
18 liability, competition and value for money -- we suggest
19 that the decision which has to be made is when, rather
20 than whether the UK transfusion services follow the lead
21 of the United States and other European countries in
22 donor screening."

23 Doctor, I think it's clear from this letter and from
24 what you have said today that you were in favour at this
25 stage of simply introducing surrogate screening.

1 A. Yes.

2 Q. Would that have been with the ALT test, the anti-HBc or
3 both?

4 A. Probably both. Probably both because anti-core testing
5 would have been fairly -- would have been really quite
6 simple for us. We probably could have started anti-core
7 testing literally within days, and we had done all the
8 groundwork -- as the Inquiry knows, we had done all the
9 groundwork on ALT testing in a big, well-conducted
10 study. So we knew exactly what the scope of the
11 problems with that would be as well. So we could have
12 started quickly.

13 Q. What was the main or the determining factor or factors
14 which led you to recommend that surrogate testing should
15 be introduced?

16 A. Well, I felt there was -- even in the absence of
17 a proper -- you know a definitive prospect of randomised
18 controlled study to provide a real answer, that there
19 was sufficient evidence -- the evidence which had
20 convinced the Blood Products Advisory Committee of the
21 FDA that surrogate testing needed to be introduced and
22 led to the decision in the United States was, while not
23 complete and not definitive, very, very difficult to
24 ignore and I had no conviction that the epidemiological
25 situation, the sort of prevalence, the amount of

1 Hepatitis C -- or non-A non-B Hepatitis infection in the
2 UK was really that much less than it was in America, in
3 1986, because, you know, commercial paid donors had
4 stopped. They had introduced similar changes in donor
5 selection in relation to AIDS that we had, and I felt
6 if, in the light of, you know, those two major changes,
7 the United States felt it had to introduce this testing,
8 we were in a very, very poor position to not follow suit
9 in the UK, unless we had convincing evidence that it
10 really genuinely wasn't a problem.

11 Q. Yes.

12 A. And we didn't have that.

13 Q. The American prospective studies, the TTV study and the
14 NIH study, in short, I think, showed a correlation
15 between elevated ALT in a donor and increased chances of
16 a recipient getting NANBH, at its very simplest.

17 A. Yes.

18 Q. And, therefore, presumably the argument was that at its
19 very simplest to introduce surrogate testing would lead
20 to an increase in patient safety an increase in the
21 safety of the blood being transfused to a patient, at
22 a very simple level.

23 A. Yes.

24 Q. What's perhaps interesting, doctor, is that that point
25 doesn't appear in your letter. Instead, the letter

1 talks about producer's liability, competition and
2 increased safety of plasma products, pooled plasma
3 products, and the question of value for money.

4 A. It possibly doesn't appear in the text but it certainly
5 appears in table 1.

6 Q. Yes.

7 A. You know, I have specifically -- okay, it's the fourth
8 point in the letter but -- and there is a reason why
9 I drafted it that way, but I have made the point that
10 actually some of the testing that we currently do,
11 specifically testing repeat, reattending donors for
12 Hepatitis B surface antigen is a very expensive way of
13 providing very little increment in safety because donors
14 virtually never seroconvert for Hepatitis B, and I made
15 the comparison between the cost of that and the cost
16 of -- and the number of cases of cirrhosis that could be
17 prevented by an even partially effective screening
18 programme. I was using different arguments because
19 I had spectacularly failed on numerous previous
20 occasions using the patient safety argument. So
21 I thought let's try something else. It was my sort of
22 last throw on this topic.

23 Q. At this time in July 1987 to what extent was patient
24 safety a factor in your consideration --

25 A. It was the factor in my consideration.

1 Q. And perhaps we should --

2 A. The objective was to try and get testing started.

3 Q. Yes. Really, should we read into this letter that it
4 almost goes without saying that your whole purpose in
5 seeking such testing was to increase patient safety?

6 A. Oh, yes. There was no other substantive reason for it.
7 I wasn't that fussed about product liability and so on.
8 I thought these arguments might work.

9 Q. Thank you. Could we then next, please, look at
10 [\[LIT0010326\]](#). This is the reaction from the transfusion
11 directors down south.

12 We can see again, top right-hand column, a letter in
13 The Lancet of 1 August 1987, and the question of
14 surrogate testing. Over the page, please, we will see
15 this is a letter from Contreras and Barbara in Edgware
16 North London.

17 Do you remember getting any reaction to your letter
18 at the time?

19 A. I obviously read the correspondence in The Lancet and
20 I'm sure some people phoned me up and said, "We
21 disagree". But I recall that in terms of my working
22 relationships with people like Contreras and Barbara and
23 so on I think it was accepted that there was difference
24 the opinion, and we were using the correspondence
25 columns, and I think appropriately, to air that.

1 I personally still feel that was a very appropriate
2 thing to do.

3 Q. If we go back to the first page of this letter, please,
4 just to give a flavour of the views of the authors, in
5 the right-hand column, two-thirds of the way down,
6 a paragraph commencing:

7 "Transfusion services must not bow to irrational
8 pressure for measures whose efficacy is unproven. In
9 the UK, transfusion centre directors resisted commercial
10 pressure for premature introduction of unsatisfactory
11 screening tests for anti-HIV; this should show the same
12 resolution with NANBH."

13 That's just an example, I think, of there being room
14 for argument as to which position you agree with or
15 disagree with?

16 A. They clearly weren't subscribers to the precautionary
17 principle.

18 Q. Yes. So to develop that a little, how would you
19 describe their approach?

20 A. I think it was quite unscientific, actually. I really
21 don't -- despite that I have a lot of respect for a lot of
22 these people. I think the arguments that were used
23 around this, really, right the way through the saga,
24 I think the sort of lack of scientific rigour failed the
25 patients to some extent. I think, you know, the balance

1 between the focus on patient safety, which to me was
2 always a reason for -- well, at a given point for trying
3 to establish the facts and then at a later point, when
4 history had moved on, I felt became a driving reason for
5 actually doing something that you had reasonable grounds
6 for improving patient safety.

7 And remember Harold Gunson's paper that he produced
8 for that 1986 meeting, when he estimated that we could
9 avoid 6,500 to 9,000 cases of Hepatitis C. These are
10 massive numbers. 675-900 cases of cirrhosis. This was
11 the transfusion service national medical director
12 putting these numbers down and then deciding not to do
13 anything about it. I couldn't compute that.

14 Q. Yes. So your position is that your position was
15 evidence-based. It may not have been complete evidence
16 but, as you put it, there were reasonable grounds for
17 believing that surrogate testing would increase patient
18 safety. So you would say, "There was some evidence for
19 my position, certainly sufficient for me to hold the
20 view I did"?

21 A. Yes.

22 Q. And there's perhaps a certain --

23 A. It wasn't entirely satisfactory evidence but there was
24 a lot of it and it all pointed -- all the evidence from
25 studies that were fairly substantial and fairly well

1 done, even though they weren't proper randomised
2 prospect of trials, pointed in the same direction. As
3 I recall, the only studies that looked at surrogate
4 testing and concluded that it didn't have any effect, if
5 you look carefully at them actually, the number of
6 patients enrolled was very small and probably not
7 sufficient to draw any conclusions from at all as
8 a statistical basis.

9 Q. Perhaps the question is, how much evidence does one need
10 before one acts, which would then lead on to perhaps
11 undertaking a cost/benefit analysis of acting and not
12 acting?

13 A. Well, this is where -- you know, this enters -- divides
14 into the health economic view and what I call the Krever
15 view, which is that if something might make a patient
16 safer, then you have to do it. That is in a very crude
17 way, as I understand, what he articulated as the
18 precautionary principle. And depending on whether you
19 are a health economist or concerned primarily with the
20 nations economics or whether you're concerned with the
21 public health or you are concerning with the health of
22 an individual, you will view those things in different
23 ways. There ain't no right answer.

24 Q. Dr McClelland, I'm about to move on from this particular
25 point. I think we have covered quite some detail the

1 views you held on surrogate testing at the time and the
2 reasons for it.

3 Just as one point of detail, the question of the UK
4 multi-centre trial and the involvement of Edinburgh in
5 it and Edinburgh submitting the grant application but
6 that being, I think, refused or rejected on
7 25 September 1987 by the chief scientific officers,
8 biomedical research committee, essentially, it appears
9 on scientific grounds that, because the proposed study
10 didn't include follow-up of recipients, there was little
11 scientific value in it. I don't propose, doctor, taking
12 up a lot of the time going through all the documents on
13 that. Instead, what I propose doing is simply listing
14 the main four or five documents for the record so they
15 can be examined if anybody wishes, but it does seem as
16 though it's not a central matter to this topic.

17 So if I may do that, we do have your grant
18 application dated 6 August 1987, which is [\[SGH0028080\]](#).
19 We also have a letter from Professor du V Florey of
20 Dundee, to the chief scientists office of
21 4 September 1987, [\[PEN0160167\]](#), essentially pointing out
22 the problems with the study.

23 We also have a letter from Dr Forbes of the Chief
24 Scientific Office in the Scotland to the DHSS of
25 13 November 1987. That's [\[PEN0160152\]](#).

1 We have another set of letters to the CSO of
2 27 October 1987, which is [\[PEN0160210\]](#).

3 And finally on this point, we have a letter from
4 Professor Hedley of Glasgow, who was either an assessor,
5 I think may have been actually a member of the committee
6 who assessed the application to the CSO, 2 November
7 1987, [\[PEN0160156\]](#), but I have to say I don't propose
8 taking up further time on that particular line.

9 Sir, I'm happy to carry on going. It may be an
10 appropriate time to pause.

11 THE CHAIRMAN: It might be an appropriate time to pause.

12 (3.14 pm)

13 (Short break)

14 (3.30 pm)

15 THE CHAIRMAN: Yes, Mr Mackenzie.

16 MR MACKENZIE: Thank you, sir. Doctor, we had looked at the
17 letter in July 1987 to The Lancet in which the Scottish
18 directors set out their support for the introduction of
19 surrogate testing. I would like now to look at events
20 in Europe, please. We have a document [\[SNB0019445\]](#).

21 We can see it's headed "Council of Europe,
22 Strasbourg 18 June 1987". It appears to relate to the
23 European Health Committee, its 21st meeting,
24 June/July 1987, and there is an extract from the report
25 of the committee of experts on blood transfusion in

1 immuno-haematology, their tenth meeting at Rome, 19 to
2 22 May 1987.

3 If we go, please, to 9447 -- it's the third page
4 into this document -- we can see Dr Gunson was a member
5 of this committee and he told the committee:

6 "In the UK a study on a cohort of donors in four
7 centres have been proposed ..."

8 Then:

9 "Proposals for a prospective study on patients
10 transfused with blood with normal and raised ALT levels
11 had not received ethical approval."

12 I haven't seen any reference to that in any other
13 document. Are you aware of what Dr Gunson is referring
14 to there, doctor?

15 A. I had never noticed that before. That's complete news
16 to me. I have no knowledge -- I'm sure I have no
17 knowledge of such a study ever going to an ethics
18 committee in the UK.

19 Q. Yes. Certainly I think your proposal in 83 involved
20 studying recipients of screened blood and unscreened
21 blood. Is that correct?

22 A. Yes, in the second proposal we -- I can't honestly
23 remember whether we had addressed it in the first
24 iteration but in the second iteration what we had
25 proposed was that the donated blood would only be tested

1 after it had been transfused.

2 Q. Yes.

3 A. Whether that would have passed muster with an ethics
4 committee or not I don't know, because we never got to
5 the stage of going through the ethics committee hoops.

6 Q. I was going to ask, if that study, proposed study, had
7 been submitted to an ethics committee in 1987, may there
8 have been ethical difficulties?

9 A. I'm sure there would. I mean, I think there would have
10 been probably quite a lot of coming and going. I don't
11 know what the outcome would have been in 1987. It has
12 got progressively more and more and more difficult to
13 get anything through an ethics committee. In 1987 we
14 probably would have got it through.

15 Q. Even though in 1986 US blood banks were screening?

16 A. Ethics committees always get themselves into a very --
17 we have through this many times but if the study -- let
18 us say the Americans had started doing ALT testing, so
19 all patients are getting ALT tested blood and no
20 patients in Britain are getting ALT tested blood and you
21 propose a study in which half of the recipients will get
22 it and the other half will get standard practice, what
23 is generally considered in the design of randomised
24 trials to be a base position that you can take to an
25 ethics committee is current practice versus something

1 that may offer some advantages. So we could have argued
2 very strongly to get it through. Whether we would have
3 succeeded or not, that's pure speculation.

4 Q. This document sets out discussion among these experts on
5 the question of surrogate testing, but we can then see
6 the outcome on the next page, please, at the bottom, the
7 very bottom. We can see:

8 "After ample discussion on this topic it was decided
9 that a working group comprising Professor Van Aken,
10 Dr Gunson, Dr Habibi and Dr Leikola would prepare
11 a brief report and if possible define recommendations."

12 Over the page again, please, we can see at the top:

13 "Later this working group reported as follows."

14 I won't that but the next page again, please, we
15 will see the conclusions of the working group, and we
16 can see, on the basis of this information, the working
17 group concluded that:

18 "1. The use of non-specific test for the purpose of
19 reducing the incidence of transfusion-associated NANB
20 hepatitis and its possible value as a public health
21 measure remain controversial issues."

22 We have seen that in terms of the differing views
23 within Scotland and between Scotland and England.

24 And:

25 "2. If a stance is taken that blood should have

1 maximum safety, then the tests would be introduced but
2 the benefits derived from this testing would not be
3 uniform throughout every country."

4 Dr McClelland, was that essentially your position,
5 that you took the stance that blood should have maximum
6 safety?

7 A. Yes, that was part of my job.

8 Q. Yes. Thirdly --

9 A. I mean, it's not completely -- it's not -- I could
10 qualify that slightly. There have to be some limits
11 around this and to take the example, a real example,
12 which was when you take acid testing for Hepatitis C,
13 which came up later on, we know that the cost of that is
14 enormous and the number of patients who are spared
15 exposure to Hepatitis C-positive unit across the whole
16 UK is of the order of one or perhaps half per year.

17 I would have been comfortable with the decision to
18 stop doing NAT testing because I think that feels to me
19 like an inappropriate use of resources which I wouldn't
20 want to defend in the public forum. But the sort of
21 levels of safety gain that with the best guess that we
22 could make about surrogate testing were much greater
23 than that and the cost was actually much less.

24 Q. There was no other step which could have been taken at
25 that time in 1987 to try and reduce the risk of NANBH

1 transfusion transmission?

2 A. I don't think there was. I think the steps that we had
3 taken in relation to AIDS -- there is evidence from some
4 countries that those contributed through complications
5 of donor selection, contributed some safety but I'm not
6 aware now of anything other than some form of testing
7 that we could have done to enhance patient safety in
8 regard to NANB.

9 Q. Returning to these recommendations, we see:

10 "3. The question of compromise of blood supply, the
11 relevant factor."

12 And then, 4, the need for counselling, et cetera, of
13 donors.

14 And then 5:

15 "The committee cannot give a general recommendation
16 on the introduction routinely of non-specific tests for
17 evidence of NANB infectivity of blood donors, individual
18 countries will have to assess the situation locally and
19 decide on the appropriate action to take."

20 Is what is said here a reasonable representation of
21 your understanding of views of your European colleagues
22 at the time?

23 A. I wasn't involved with this group at that time, so
24 I can't directly answer that. But this is very
25 consistent with the sort of very measured advice that

1 I would have expected to come from that group. It did
2 include one member, Dr Habibi, whose service had
3 introduced surrogate testing. I think this was quite
4 consistent with my understanding of these guys.

5 THE CHAIRMAN: Would you have considered the fourth item
6 particularly important?

7 A. Oh, yes. I mean, this was one of, you know, very
8 substantial concerns because, as I said this morning,
9 you know, you take -- somebody walks in the door as well
10 and you then have to tell them a few weeks later that,
11 "Well, you are probably well but you have got this funny
12 test in your blood and we can't accept it for
13 transfusion", and if you have a clinical -- our view has
14 always been we have a duty of care to the donor, whose
15 wellbeing we compromise in this way to see that they are
16 not just properly and appropriately informed of what has
17 been found but they have the follow-up care, and it's
18 something I feel very strongly about because when I went
19 first to work in blood transfusion, for example, any
20 donor who had Hepatitis B as a result -- was found to be
21 a Hepatitis B carrier as a result of our testing could
22 not get dental treatment in Edinburgh.

23 THE CHAIRMAN: Do you think that at this stage the working
24 group would have a clear idea of how they would inform,
25 how they would counsel, people, given that a few years

1 later, when tests for Hepatitis C came along, a fair
2 degree of chaos resulted?

3 A. I'm not entirely sure that I recognise your
4 characteristics of the Hepatitis C situation. In
5 Scotland Dr Jack Gillon produced a very good -- with
6 clinical colleagues working through the College of
7 Physicians -- set of guidelines specifically for
8 counselling, which basically were adopted and used.
9 There were a couple of issues which were contentious,
10 notably look-back, which I'm sure you will be returning
11 to at some point, but in terms of the clinical, the sort
12 of the content of the clinical management of the
13 patients found to be Hep C positive, I think that was
14 fairly well done.

15 But a similar sort of process would have been
16 required here and it would have been more difficult
17 because the finding was much less concrete --

18 THE CHAIRMAN: Positive.

19 A. It had a far wider range of potential interpretations,
20 ranging from the very serious to the possibly trivial,
21 you know. And you know, would have been a challenging
22 problem, but I have no doubt that it could have been
23 managed. I share very little personal information about
24 how this was handled indeed United States but
25 traditionally in the United States the blood collecting

1 organisations took a much more cavalier approach to
2 their donors and basically sent them the result through
3 the post and left it to go and find their own doctor if
4 they wanted to do something about it. We never felt
5 that that was an appropriate way to handle these things.

6 PROFESSOR JAMES: Can I just add to that a moment? First of
7 all, a million blood donations a year in the UK, I mean,
8 more actually but let's say a million, 4 per cent for
9 the sake of this argument with a significantly raised
10 transaminase by general consent, so that's 40,000
11 individuals a year. Had you in Scotland, you and your
12 colleagues, when proposing that there should be
13 surrogate testing, thought, for example, not just
14 chatting to the people but how many more investigations
15 would be done, who people would be referred to? For
16 example, would you be automatically doing autoantibody
17 screens, MCVs, gamma GTs, in other words investigating
18 possible liver disease? Had you kind of thought this
19 through?

20 And just second and briefly, I mean, although with
21 respect, although you say that Jack Gillon and indeed we
22 know he did, produce some guidelines, the evidence from
23 the witness statements that the Inquiry has seen
24 suggests that on the whole, to my way of thinking, and
25 no doubt this will be properly explored later, but as

1 a matter of fact, you know, people heard about their
2 Hep C from their GP who then said, "I have not got the
3 faintest idea what this means, you know, you can go and
4 see somebody or you needn't". It was done in a very --
5 people learned about their Hep C status often in a very
6 ad hoc fashion, let's put it that way, it wasn't
7 extraordinarily well organised, although it was thought
8 through. And I'm just asking really whether you had
9 really thought through very carefully in retrospect what
10 the implications were of making it recommending.

11 A. I think the honest answer to that is probably we did
12 not.

13 PROFESSOR JAMES: I'm really asking these questions on
14 behalf of the Scottish Government sitting over there,
15 I should say.

16 A. I don't think that we followed -- when you talk about
17 40,000 donors having to be counselled, followed,
18 retested, formed possibly requiring further
19 investigations, I don't believe that we really took that
20 on board. You see, the only experience we had before
21 was two serious infections which were relatively a very
22 low prevalence in the commune, Hepatitis B and HIV --

23 PROFESSOR JAMES: Exactly.

24 A. -- which were relatively easy to manage, and even with
25 Hepatitis C the numbers were relatively small. We are

1 talking about one in 1,000 on the first pass and falling
2 considerably after that. So the numbers here, I think
3 the answer to your question is, no, we probably didn't
4 really -- I don't think I personally internalised the
5 implications of that and that was probably a bit
6 arrogant on my part. But, no.

7 PROFESSOR JAMES: Thank you very much. Thank you, sir.

8 MR MACKENZIE: Thank you. Doctor, I would like to carry on
9 and look at some documents from 1988 and 1989 just to
10 finish the factual chronology of the consideration given
11 to surrogate testing.

12 We are in now 1988, document [\[SNB0027321\]](#). This is
13 the minutes of a directors' meeting of 12 April 1988.

14 If we go to page 4, please, 7324, and we see under
15 "(e) surrogate testing", a few paragraphs down we can
16 see:

17 "It was confirmed that it had been agreed not to
18 introduce ALT testing in Scotland until it had become UK
19 policy but directors wished to reserve their position on
20 this matter in the light of reports of the commencement
21 of ALT testing in at least one England and Wales RTC."

22 The question of "until it had become UK policy",
23 what does that mean? Does that mean policy of the UK
24 Government or policy of the UK transfusion services, do
25 you know?

1 A. I don't know. It possibly wasn't even defined fully in
2 the discussion. I can't answer that.

3 Q. But certainly some UK-wide approach rather than Scotland
4 going declaring UDI?

5 A. That's the sense I take from it.

6 Q. And have you any recollection of when the English centre
7 commenced the ALT testing?

8 A. Yes, I do have a vague recollection of one of the
9 centres in the north. I think it may have been
10 Liverpool that had -- but it's a vague recollection and
11 it was -- it may have been more at the level of rumours,
12 as is implied here, than an established fact.

13 Q. Yes.

14 A. It's entirely possible because, as the Inquiry will have
15 heard, the English centres were managed by regional
16 health authorities and each was financed quite
17 independently of the other. So if a transfusion
18 director quietly reached agreement with the appropriate
19 people in his or her RHA, they could get on with it.

20 Q. But is it essentially in the realm of rumour and
21 speculation rather than that being something concrete
22 which happened?

23 A. From my knowledge, it's in that realm.

24 Q. Yes. Thank you. The next document is [\[SGH0017505\]](#).
25 We will see these are the minutes of a meeting of

1 the Scottish BTS and haemophilia directors on
2 5 May 1988. If we could go to page 4, please, under
3 item 6 "Non-A non-B Hepatitis screening", the chairman,
4 who is Dr Forrester, said:

5 "That a research project was being mounted in
6 England and that a decision whether to introduce
7 screening would probably wait upon its outcome.
8 Dr McClelland and Professor Cash considered the delay
9 unjustifiable."

10 So your position remained consistent, doctor, that
11 surrogate testing should be introduced.

12 Then we know that in May 1988 Chiron announced the
13 discovery in cloning of the NANBH virus, albeit
14 scientific details weren't published until a year later.

15 We then go into 1989, please, document [\[SNB0061975\]](#).
16 We see the creation of a new committee, the UK Advisory
17 Committee On Transfusion-transmitted Diseases. The
18 first meeting on 24 February 1989.

19 We can see those present didn't include yourself,
20 doctor, but Professor Cash and Dr Mitchell were members.
21 I'm not going to dwell on this committee because it will
22 be, I think, considered in more detail in the next
23 topic, HCV screening, but just to see what was said
24 about surrogate testing, if we could go, please, to
25 page 4 -- I should have said the meeting was on

1 24 February 1989.

2 Page 4, item 7, "Non-A non-B Hepatitis",
3 a discussion of various matters. Then paragraph 7.4:

4 "It was agreed that there should be no
5 recommendation to insulate ALT testing until the current
6 study was completed in England. However, there was
7 a degree of inevitability about the introduction of the
8 test which was required by regulatory authorities in
9 other countries to determine the fractionated plasma
10 products. This would be discussed BPL in the near
11 future."

12 I think you touched upon that earlier today, doctor,
13 about there being a parallel but some instances
14 intertwining point about the need for surrogate testing
15 of donations going into pooled plasma?

16 A. Yes.

17 Q. I'll explore that with Professor Cash a little bit more
18 tomorrow.

19 We also see in paragraph 7.5 reference to the Ortho
20 Pharmaceutical Company and their test.

21 The next document, please, is [\[SNB0019416\]](#). This is
22 another new committee, which again I think will be
23 looked at more closely in the next topic but the
24 advisory committee on the virological safety of blood.
25 These are the minutes of the second meeting on

1 22 May 1989.

2 Can we go to page 3, please, again consideration of
3 non-A non-B from paragraph 16 on.

4 Paragraph 19:

5 "Plasma fractionators were considering funding ALT
6 testing once the scientific basis was established. This
7 would be necessary if excess products were to be sold to
8 Europe:

9 "20. It was agreed NANB testing should not be
10 introduced into the NBTS prior to the results of the UK
11 BTS NANB trial...

12 "21. The department would keep the issue of testing
13 under review. The use of Chiron or surrogate testing
14 would be influenced by the Chiron data once released;
15 MRC might be asked to consider. Members regarded the
16 matter to be a priority."

17 The next document, please, is page 5 of [\[SNF0011383\]](#).
18 This is a report of the multi-centre trial into surrogate
19 testing. I think it's SNF0011387. It may have
20 another -- yes, if we try perhaps [\[SNF0011383\]](#).

21 This is Dr Gunson's report. If we go three pages
22 on, we can see it's dated 3 November 1989. We can see
23 that there.

24 Could we go back to the beginning, please, 1387? So
25 he reports on the results of the trial. I think we can

1 go to the conclusions, please, over the page.

2 So 4.1:

3 "Taken overall, 3.2 per cent of donors would have
4 been rejected for raised ALT and 0.63 per cent for
5 anti-HBc seropositivity."

6 A reference to the Swiss Red Cross' policy:

7 "A disturbing finding was the variability of ALT
8 testing in the three centres. There were some donors in
9 Manchester who had normal levels of ALT who would have
10 been rejected in Bristol or north London.

11 "4.2. It is difficult to conclude how many of the
12 donors with a raised ALT or seropositive for anti-HBc
13 may have transmitted non-A non-B Hepatitis. To
14 determine this a prospective study would have to be
15 performed.

16 "However, it is evident that the ALT test is
17 non-specific since the correlation with alcohol intake
18 and obesity is striking. Similarly, the significance of
19 a positive anti-HBc result is unknown.

20 "4.3, following the introduction of the anti-HCV
21 test the only justification for performing the ALT and
22 anti-HBc tests routine is:

23 "4.3.1. The possibility that ALT (in particularly)
24 will identify a 'window' of infectivity prior to
25 seroconversion for anti-HCV.

1 "4.3.2. The possibility that anti-HCV only
2 identifies one of a number of viruses which cause NANBH.

3 "The introduction of other specific viral markers
4 and increased sensitivity of the anti-HCV test in due
5 course may render the subject of surrogate testing of
6 academic interest. Meanwhile, the desirability of
7 introducing these tests remains an issue of health
8 economics."

9 Simply for the record, without going to them, there
10 is a fuller report of the multi-centre study into
11 surrogate testing in April 1990 at [\[PEN0160075\]](#). And
12 then a published report in 1992 by Anderson and others,
13 [\[PEN0170831\]](#).

14 So that's the end of the UK multi-centre trial.

15 I think, finally, if we could then, please, look at
16 document [\[SNB0019563\]](#)? These are the minutes of the
17 advisory committee on the virological safety of blood on
18 6 November 1989.

19 If we go to page 4, paragraph 23, we see
20 a discussion of non-A non-B Hepatitis and discussion of
21 the Chiron test. And over the page, please,
22 paragraph 29 starts:

23 "The committee's feeling was that there was no case
24 for using surrogate tests for non-A non-B."

25 So I think by this stage there was sufficient

1 confidence in the Chiron anti-HCV test that the view of
2 the advisory committee was that there was then no case
3 for surrogate testing, and I think that's largely the
4 end of the question of surrogate testing in the UK,
5 subject to one or two points we will discuss with
6 Professor Cash tomorrow, to do with ALT testing of
7 plasma for pooled products.

8 Thank you, doctor, that completes the chronology of
9 documents and events. I would like now to return to
10 your statement to complete that, please.

11 We have now largely, I think, covered most of the
12 documents and events I would like to take you to, so we
13 will be able to go through your statement more quickly.
14 The only question which occurs, sir, is that it is a few
15 minutes to four. I'm happy to carry on a bit. I know
16 Dr McClelland has to leave by ten past four or we can
17 simply stop now.

18 THE CHAIRMAN: What's the progress after that?

19 MR MACKENZIE: If we could continue until 10 past, it might
20 be helpful, because we have Professor Cash coming
21 tomorrow, and if we could start just after 11, I'm sure
22 he will take until lunch.

23 THE CHAIRMAN: I rather think that there is considerable
24 interest on the part of Mr Di Rollo in what we have been
25 dealing with. At least I can't imagine that there is

1 none. And I think I have to have regard to the total
2 amount of time that's likely to be taken.

3 MR MACKENZIE: Yes.

4 THE CHAIRMAN: Do you anticipate taking all day with
5 Dr Cash.

6 MR MACKENZIE: No.

7 THE CHAIRMAN: Did you anticipate getting Dr McClelland
8 finished today?

9 MR MACKENZIE: No, I thought it was unlikely.

10 THE CHAIRMAN: I think that we have to take a reasonable
11 judgment. If ten minutes would make a material
12 difference, then fine.

13 MR MACKENZIE: I think it would help, sir.

14 THE CHAIRMAN: If it's not going to make a material
15 difference, and Dr McClelland has to come back tomorrow,
16 the notion of starting Dr Cash right away really doesn't
17 have much substance, because I don't think you are going
18 to finish.

19 MR MACKENZIE: I certainly won't finish Dr McClelland today,
20 certainly.

21 THE CHAIRMAN: Let's take one more topic and see how we get
22 on.

23 MR MACKENZIE: I'm grateful, sir, thank you.

24 THE CHAIRMAN: But make sure, if I don't look like I'm
25 responding to the time that you do.

1 A. Okay.

2 PROFESSOR JAMES: Get up and walk out.

3 THE CHAIRMAN: I'm not encouraging that.

4 MR MACKENZIE: Thank you. Well, doctor, we will make what
5 use we can of the time we have.

6 At page 12, please, of your statement. We are back
7 to the standard questions that we asked all witnesses
8 and we had asked:

9 "The research undertaken by the SNBTS in the 1980s
10 into surrogate testing for NANBH".

11 And you explain that:

12 "During the 1980s, two groups within SNBTS attempted
13 to identify factors ('markers') in the blood that could
14 be used to detect blood likely to cause NANBH."

15 The first reference is to Hopkins, publication in
16 1982, which is [\[PEN0170931\]](#). I think the other
17 reference is Tabor, 1982, [\[PEN0170933\]](#). I don't have to
18 go to either because in the next two paragraphs you
19 explain the work in Scotland.

20 In 2.2 you explain Dr Dow's work in the
21 West of Scotland, part of which was to seek to identify
22 a test which could be used to detect blood likely to
23 cause NANBH. Ultimately, I think that work was
24 unsuccessful.

25 And similarly 2.3, doctor, Hopkins in Edinburgh,

1 along with Miss Sonia Field, I think who similarly
2 sought to identify a serological marker, which again was
3 unsuccessful, but there was no shame in that because, as
4 you go on to tell us over the page, at paragraph 2.4,
5 you explain:

6 "The research groups in other countries pursued the
7 same goal and it has been estimated that 30 or 40
8 candidate test systems were reported."

9 The reference there is the Dienstag and Alter paper
10 of 1986 we looked at today and that:

11 "None of these efforts were successful. In 1989 the
12 discovery of the causative virus was reported and
13 designated as Hepatitis C virus."

14 Et cetera.

15 The standard question 3, we asked why the
16 multi-centre study into surrogate testing did not
17 include a Scottish blood centre. I think the answer in
18 short, doctor, is because the application for funding
19 was refused.

20 I think we will take paragraph 3.1 at read.

21 Paragraph 3.2 you explain:

22 "This study could never have provided any
23 information about (a) the incidence in blood
24 recipients..."

25 Et cetera, and I think we have covered much of that

1 ground this morning.

2 We have also given the references earlier in the
3 evidence as well to the protocol for the study and the
4 final published report.

5 You also go on to say you can't be certain why there
6 was no SNBTS participation in the multi-centre study but
7 you go on to set out various factors. I think we can
8 take that as read because we have covered all of this
9 ground.

10 I think I'll simply take the paragraphs in 14 as
11 read because, as I say, we have covered the ground.

12 Standard question 4 was:

13 "Why it took until October 1988 until the
14 multi-centre study into surrogate testing commenced."

15 Again, we can see your answer 4.1 and perhaps take
16 that as read.

17 At the top of page 15 -- I'll take Professor Cash to
18 a DHSS funding document, which I think is of some
19 interest. I think we will keep had an for tomorrow.

20 Standard question 5, the question of funding for
21 testing, I'll leave that for Professor Cash. I think
22 that will be more appropriate.

23 In question 6 we asked:

24 "Why the SNBTS first sought funding from the SHHD in
25 1986 for the introduction of surrogate testing in 1987."

1 You refer in your answer to the American blood
2 collection organisations by 1986 returning to the
3 question of surrogate testing, and you are sure that's
4 a factor in reactivating interest in the topic in the
5 UK.

6 At the top of page 16, if I may ask you a question,
7 you say:

8 "There was still a belief in the UK that non-A non-B
9 PTH was a less important problem than in the
10 United States and many of the more influential
11 professionals in the UK BTS were opposed to the
12 introduction of surrogate tests. I imagine that such
13 opinions would have announced professionals officers in
14 SHHD."

15 Who were the more influential professionals in the
16 UK BTS who were opposed to the introduction of surrogate
17 tests?

18 A. Well, I think we have seen their names on correspondence
19 and various other documents today but, for example,
20 Dr Contreras was fairly strongly opposed. Dr Barbara,
21 who worked with Dr Contreras, was at best ambivalent.
22 They actually were between them extremely influential.

23 I think we saw in other patients that other
24 transfusion doctors in both the Scottish service and the
25 English service had expressed doubts about the benefits

1 in letters to The Lancet and so on, some of which we
2 have seen this afternoon. So I think across the piece
3 you actually find quite a number of individuals in
4 fairly senior professional positions voicing
5 reservations about this.

6 Q. Thank you.

7 Perhaps the final question for today, doctor,
8 question 7, we asked:

9 "Why the directors ... agreed at their meeting on
10 3 March 1987 that surrogate testing ... should be
11 introduced ..."

12 Again we have covered that, I think. You do say:

13 "We were undoubtedly concerned that despite the
14 persisting uncertainties about the real safety gains
15 that might be achieved, failure to introduce testing
16 could constitute a failure to protect patients from some
17 degree of avoidable risk."

18 Does that really come back to your position as
19 stated before, about seeking on maximise the safety of
20 blood?

21 A. Yes.

22 Q. Sir that, may be a reasonable place to stop?

23 THE CHAIRMAN: Thank you very much. Yes. I have got
24 another bit of business, Dr McClelland. So you are free
25 to go.

1 Ladies and gentlemen, I have had an application that
2 the evidence of potential witnesses should be taken by
3 affidavit, dealing with certain aspects of
4 Mr Tamburrini's history. I hope that I have made it
5 clear that I want these matters to be dealt with in
6 public, at least as a matter of record, but, of course,
7 the deaths raise particularly sensitive issues in
8 respect that in particular in those cases only
9 individuals are named.

10 I want to be as helpful as I can in dealing with
11 this.

12 I'm not prepared to take a final decision on the use
13 of affidavits at the moment, I have not seen the
14 affidavits or drafts of them and so I can't form any
15 view on the extent to which there might be conflicts
16 between the contents of affidavits and the evidence that
17 I have already heard on oath or on affirmation.

18 What I am prepared to do is to consider drafts of
19 affidavits and, having done so, and having shared that
20 information with Mr Anderson and Mr Johnston, to take
21 account of any submissions that are made and then, if
22 appropriate, to decide whether I can treat the
23 affidavits as acceptable evidence while both maintaining
24 the integrity of the final report and without subjecting
25 the content to examination here.

1 So, Mr Di Rollo, I think I'm putting the matter back
2 in your hands again. I don't require a new application
3 but if you want it to be processed, I think I really
4 need to see the affidavits in draft and to consider how
5 I can handle them. As you know, I have got some idea
6 about the possible content of some of them but not in
7 any way enough information to reach a decision.

8 I don't expect you to rush this. I imagine that it
9 will take a little time to be in a position to deal with
10 the matter properly, but unless you have got some
11 overriding reason that I should listen to at this stage,
12 that is my intention as to the way forward.

13 MR DI ROLLO: Can I ask for one point of clarification, if
14 I may?

15 THE CHAIRMAN: Yes.

16 MR DI ROLLO: That is in the application, the suggestion was
17 that the affidavit should be taken by a member of the
18 Inquiry team or a member of the Inquiry staff, as
19 opposed to the solicitors at Thompsons, and I think the
20 proposal was that an affidavit in draft form would be
21 taken by such a person and thereafter it could be
22 considered. In the proposal that is being made just
23 now, is it being suggested that the affidavit will in
24 fact be gathered in draft form by a member of the
25 Inquiry staff?

1 THE CHAIRMAN: I haven't thought that through. I'm
2 concerned about it because if a member of the Inquiry
3 team is to take this affidavit and in effect to become
4 involved in an editorial process before I see it, then
5 I think the exercise might be compromised.

6 I think on this occasion the drafts should be
7 prepared by Thompsons and submitted. If we go on to
8 have affidavit evidence in substitution for oral
9 evidence, then the matter will be considered afresh at
10 that stage. Because, as you will appreciate, I would
11 not want there to be any significant problem as between
12 draft and final affidavit stage. But at this stage
13 I would not wish to have a member of the Inquiry team in
14 effect put in the position of having to decide what
15 should or should not go into the affidavit of any member
16 of the family or any other witness who was tendered.

17 MR DI ROLLO: Just as a follow-up, in terms of it being
18 a draft affidavit, that would mean that the affidavit
19 wasn't in fact sworn, it was just simply --

20 THE CHAIRMAN: That is so.

21 MR DI ROLLO: Very well.

22 THE CHAIRMAN: It is strictly a draft.

23 MR DI ROLLO: I understand.

24 THE CHAIRMAN: Is anyone else inclined to suggest that that
25 is not an appropriate way to go forward?

1 Very well, that's what will happen. I would like
2 it, of course, to happen within a reasonable time,
3 Mr Di Rollo, having regard to my interest in surviving
4 this Inquiry.

5 (4.16 pm)

6 (The Inquiry adjourned until 9.30 am the following day)

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8

I N D E X

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10 DR BRIAN McCLELLAND (continued)1
11 Questions by MR MACKENZIE1

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