TOPIC C2 – SURROGATE TESTING OF BLOOD FOR NON-A NON-B HEPATITIS

RESPONSE OF DR RUTHVEN MITCHELL TO WITNESS STATEMENT REQUEST DATED 1.09.11 - (responses in quotes and italics)

Queries

(1) Should a large scale prospective study, as originally proposed by Dr McClelland in 1981 (i.e. along the lines of the US TTV and NIH studies and including the follow-up of recipients), have been carried out in the UK in the early 1980s (or at some point thereafter) with the following aims:

(a) to assess the prevalence of post transfusion NANBH in the UK,

(b) to evaluate surrogate markers for the disease,

(c) to investigate the natural progression and seriousness of the disease, and

(d) to produce a library of "known" infected sera with which to evaluate any future assays which became available?

"In my recall the decision was made not to undertake the study proposed for the following reasons:-

- *we were dealing with a diagnosis of exclusion and as a worldwide phenomenon where hundreds of thousands of apparently healthy people are probably carrying the virus, a few of whom may be blood donors.*
- *there was little, if any, clinical diagnosis of Non-A Non-B as it was called, but much evidence of other causes of Hepatitis. There was a paucity of clinical reporting Non-A Non-B post-transfusion hepatitis to blood transfusion centres.*
- *there was a belief that voluntary donors gave truthful answers to all health questions and remunerated donors had a financial inducement to tell lies.*
- *information concerning infection at penal institutions in the USA revealed a different population of donors from voluntary donors.*

- *there was, and is, no clear convincing evidence that surrogate tests are specific and there are many causes of jaundice and hepatitic disfunction when patients have not even received a blood transfusion. From the early days of Hepatitis B testing, various panels of donors see that when available for any future testing, including a small number of post-transfusion patients (???).*"

(2) If such a study had been carried out, to what extent is it likely to have met the objectives set out in (1) above? To what extent would such a study have provided more information upon which to base a decision on whether surrogate testing should be introduced?

"For the reasons stated, such a large scale prospective study would not have provided useful pointers to the cause or causes of Non-A Non-B Hepatitis."

(3) Did the conclusions of Drs Dow and Follett[1] place sufficient emphasis on the likely prevalence and seriousness of post-transfusion NANBH? In particular, as well as having regard to reported cases of the disease, did the work of Drs Dow and Follett have sufficient regard to the fact that most cases of NANBH were sub-clinical and were unlikely to be detected without prospective follow-up (by biochemical testing) of recipients?

"The findings of Dow and Follett were carried out using a wide range of serum samples from a variety of individuals and their findings could not have detected sub-clinical infection since there were many possible causes. The SHHD figures were partly based on observation in a low level of clinical notification."

(4) In the second half of the 1980s, did SHHD medical officers place sufficient weight on the likely prevalence and seriousness of post-transfusion NANBH.[2]

[1] As contained in Final Report, July 1984 (SGH.002.8040), PhD Thesis, 1985 (LIT.001.3300) and Special Report, May 1986 (SNF.001.1109)
[2] see, for example, the minutes etc by Dr Forrester d.12.6.86 (SGH.002.8142), 26.1.87 (SGH.003.1657), 9.2.87 (SGF.001.2261) and 30.8.88 (SGH.002.4672) and the minute by Dr McIntyre d.6.4.87 (SGH.002.8127)

To what extent did their views in that regard influence their opinion on whether surrogate testing of blood donors should be introduced?

(5) If surrogate testing of blood donors (i.e. testing for elevated ALT and/or anti-HBC) had been introduced in Scotland:

(a) what percentage of donors are likely to have been deferred,

"The donor prevalence in the healthy population was as stated by Dr Crawford and colleagues."

(b) could a sufficient blood supply have been maintained,[3]

"Sufficient blood stocks could have suffered loss by deferral of non-infected donors. Dr Gillon has estimated about 10,000 per annum in Scotland. I have already written about seasonal difficulties which would compound this figure. I have already written a separate report on the correspondence between Professor Cash, Dr Crawford, Professor Wheatley and myself"

and

(c) to what extent are cases of post-transfusion hepatitis C likely to have been prevented (having regard, for example, to the finding that in the first six months of HCV screening the prevalence of HCV in Scottish blood donors was 0.088%, and that elevated ALT levels were found in 59% of HCV positive donors)[4]?

"The 0.088% HCV positives and confirmed by specific and sensitive second generation tests and beyond, is low. 5% of these HCV positive samples showing elevation of ALT above three times normal would mean

[3] See, in relation to the question of blood shortages, letter d.28.1.85 from Dr Cash to Dr Bell (SNB.013.4238), letter d.16.1.87 from Dr Cash to Dr Mitchell (SNB.011.3355), the discussion of declining blood collection in Appendix II of PES 1988 (SGH.002.0841 at .0843 to .0849) and letters d.15.1.90, 29.1.90 and 6.2.90 between Professor Cash and Drs Mitchell and Crawford (SNB.013.6496, SNB.014.1589 and SNB.005.2159)

[4] Crawford et al, 1994 (PEN.002.0582)

that 57% of 0.088%, which is arithmetically very low, compared with ALT elevations reported for other reasons.

Signed ……..

Date ……..