# PROF IAN HANN STATEMENT TO PENROSE INQUIRY DATED 13/9/2010

I am responding to a request in a letter of 23/9/10 received 24/9/2010, from Lord Penrose for a written statement of evidence to the Penrose Inquiry. I will do my very best to answer the questions as posed, bearing in mind that these events took place between 23 and 28 years ago. The questions relate to the realisation of the risk of AIDS transmission by commercial factor concentrates in Scotland, in the light of proposals that their use should be curtailed and of progress towards self-sufficiency in Scotland.

Before answering the specific questions I would like to provide some background to the general situation with regard to my own position at the time and that of blood product usage in general, so far as I can remember. I have no reason to challenge any of the assertions in the preliminary report, although I have no written contemporaneous record or historical notes of my own. I am assuming that the Inquiry wishes me to recall my memory of the past and not to simply reiterate the very good research that has already been done, but which I have no means to check.

## Preamble and Background

The timing of my post at Yorkhill RHSC should be checked – I have asked that this be done for the Inquiry. My memory is that I started work on January 1st 1983 – to the best of my recollection I stated in 1983. I definitely started on 1 January as I recall that very well. It is important to understand that Haemophilia Care and Haemostasis was only one part of my job. The post that I took up in a blare of national publicity following the resignation of my predecessor Dr Willoughby (quoting poor resources and other matters) contained multiple roles, and my estimate was that haemostasis/haemophilia took up approximately between one quarter and one third of my time. The reasons for Dr Willoughby's departure were aired in the media at the time and in a single conversation I had with him prior to agreeing to take up the post. My recollection was that he was very disaffected with a general lack of resources and in particular a lack of trainee medical NHS-funded posts and the funding for a second consultant. Also the perceived lack of funding for bone marrow transplant and a general concern over poor lab quality partly due to poor equipment. Finally, he had concerns about the management of children with solid tumours being managed solely by general surgeons rather than fully trained paediatric oncologists. I was head of the department of haematology and oncology for the West of Scotland's children and was initially single-handed. I was also in administrative charge of the laboratories for haematology and blood transfusion for the RHSC and Queen Mother's Maternity Hospital and Strathblane Childrens' Home Hospital. I was head of the Bone Marrow Transplant Unit and head of one of the larger childrens' general haematology, leukaemia and solid tumour units in the UK.

I took over at a time of great turmoil following Dr Willoughby's very controversial departure. There was a major problem with the laboratory which was antiquated and in some respects unsafe and also there were threats of industrial action (as throughout Scotland at this time) related to who actually managed the lab. In addition, Scotland had been very slow to adopt a rationalised approach to bone marrow transplant which was seriously under resourced, and which I addressed with Dr Burnett at GRI and the current Health Minister by a major fund raising drive and external/internal reviews. In addition to all of this there was a general lack of protocols for patient management and it took a great deal of my time to write these and put right certain areas which were behind the times e.g. antimicrobial therapy of the immunocompromised.

I state all of this so that the Inquiry understands that my job was not the same as the other Haemophilia Directors. At times I had to rely on the advice of Dr Ludlam and Dr Lowe with regard to patient management. There was also an absolutely crucial role for the haemophilia clinical staff grade Dr Pettigrew whose memory of events will undoubtedly be much better than mine. In my view she was an excellent and intelligent doctor with first rate clinical and inter personal skills who kept well up to date with events via the literature and

meetings and liaison with Dr Lowe in particular. She also provided frequent and excellent liaison with the Haemophilia Society and parents and families of Haemophilia through direct contacts and specific support meetings. We always encouraged very close contact and exchange of information. I would like to say that Dr Lowe and Dr Ludlam were also always very supportive and very well informed. In my view then and now, they are amongst the best haemostasis doctors and Haemophilia Centre Directors in the British Isles. In my experience their sole interest was to provide the best possible care for their patients and that was also my aim throughout.

My first exposure to the problem of AIDS came as a bombshell to most participants at a meeting in Stirling Scotland in 1982 before I took up my post. In June that meeting was the second International Immunocompromised Host Symposium (ICHS). The shock of that meeting means that I have good recall of the events. The talk throughout the meeting was of a devastating wasting sexually transmitted disease and possible causative factors such as cytomegalovirus infection. There was also a passing reference to a very small number of haemophilia patients and discussion, which continued for years as to whether they were immunocompromised because of the large exposure to antigens in their blood products.

**The Situation in January 1983**

I will now do my best to answer the questions in chronological order as placed before me in the Schedule "Issue in respect of which a statement is sought". In order for me to specifically address the points in relation to use of commercial products it would be useful to see actual amounts transfused and also whether or not any HIV conversions occurred in the children after 1983. My memory is that there were none, but I do not have that data. Also, I see that the use of Factorate was the only commercial product used during my time at RHSC and that there was a dramatic fall from 629,697 units in 1981 to 5,460 units in 1984 which is a fall to 0.8% usage. It would be useful to know how far into 1984 that usage extended, but the numbers do I am sure reflect the fact that Scottish product was becoming available in sufficient amounts for most purposes, but I am also sure that there were times of insufficiency. The Inquiry should also be aware that I and others had been brought up not to chop and change products for individuals because of a perceived risk of devastating inhibitor antibody induction, and because certain persons reacted badly to certain products, and that was certainly a problem with low purity Scottish products. Thus, in an individual case it may not have been at all appropriate to swap to Scottish when supplies may have been insecure and reactions may have occurred – this can only be addressed on an individual basis.

The question arises from the preliminary report at 8.12, 8.14, 8.16 and 8.17 and the other documents to which the report refers, as to whether we knew that haemophiliacs were at higher risk from blood products produced in USA. I cannot answer this specifically except to say that there was an early recognition of what was initially thought to be a risk leading to a very small number of haemophilia persons having AIDS. There was no indication of AIDS – like illnesses in my own patients and the realisation of risk only became evident when reliable HIV tests became available – a timing which it would be helpful to see in a time – related form in the Inquiry report, because then everything changed virtually overnight and we spent much time preventing these patients from being branded as highly dangerous infected patients in Scotland. I was a general paediatric and neonatal trainee in 1975 with little contact with haematology problems; I rarely watched television and did not read letter sections of journals which reflected personal prejudice, and always relied upon actual peer reviewed publications and data. I do not recall the programme or the letter. My response to Dr Cash's letter is that this was not the general view – I refer you to the UKHCDO meeting of 1983, 8 years later and the fact that UK products have transmitted infection and continue to be a perceived risk e.g. with nvCJD. In this instance and that of HIV these were entirely new diseases which we had not expected, unlike hepatitis which had been clinically evident for a very long time.

I did not attend the meeting at the beginning of 1983 of SNBTS/Haemophilia Directors and was probably not invited as I had only just arrived, but I am sure that Dr Pettigrew would have reported back. I would not have attended the UKHCDO meeting in 1981 and 1982 as I

was not a Haemophilia Director then. I have no knowledge of the ISH meeting in Budapest 1982 except that I did not attend – this was not a scientific meeting that I would ever attend. I do not recall receiving a letter in relation to the referred MMWR extract in 1983, although I may have done – I am not sure when the UKHCDO started including me. I have no recollection of the Heathrow meeting of Jan 24th 1983, and I rarely attended meetings with drug companies. I had little time to attend meetings and those that I did were official NHS or UKHCDO or WFH where one could be ensured of objectivity. I doubt that I was even aware of this meeting.

There was a special meeting of the UKHCDO in May 1983 to discuss AIDS and at about that time, the virus was found, although this discovery was not at first appreciated. I do not know why Glasgow was not represented at the UKHCDO meeting and we could have relied on feedback from the main organisation and/or Dr Ludlam but clearly someone from each part of the country should have been asked to all important meetings. My memory of this time is vague although I do recall that there was at about this time discussion of risk of USA product with regard to virus transmission and that the Haemophilia Society opposed any restriction on their import for use. It would be wrong of me to imply that I can recall at what time I and other Directors came to the conclusion that we should use exclusive Scottish product. I have stated above why that decision had to be individualised and that use fell dramatically after my arrival. I think that some time during late 1983 it became clear that supplies locally were becoming sufficient for home therapy (the use of cryoprecipitate for such being clearly inappropriate). Up until then it had been necessary for me to curtail necessary prophylactic therapy for patients with recurrent bleeds associated with severe haemarthrosis. It must be also recognised that at this time there was increasing and compelling evidence from Scandinavia that optimal therapy for severe haemophilia affected children was regular at least three times per week prophylactic treatment. This would eventually revolutionise the lives of these patients. However, although I see references to self sufficiency, there would not at this era ever have been sufficient product in Scotland to take on this development, even for essential short term therapy (and operations e.g. synovectomy had to be planned and sometimes delayed until product became available). I was able to eventually take this approach only when recombinant products became available and Great Ormond Street was the first or one of the first units in the world to adopt optimal therapy i.e. recombinant prophylaxis devoid of infection risk and preventing bleeds. When making calculations of self-sufficiency the Inquiry should be aware that each child on prophylactic therapy would require more than 6,000 units per kilogram body weight per year of factor concentrate. Neither the UK nor Scotland were producing enough concentrate at this time to facilitate such a major step forward (Please see publications from Great Ormond Street under my name and Dr R Liesner et al).

**In response to a series of questions about meeting attendance**

1983 was an extremely busy time for me and I was single-handed at consultant level until towards the end of the year. Thus I do not think that I attended the WFH/ISTH meeting in Karolinska in June and I was not a member of the CSM Biologicals sub committee. I do not know if its recommendations were circulated in Scotland but I have no recollection of receiving such documents. I did not attend the WHO meeting on AIDS in Aarhus in October or the WHO Geneva meeting in November and do not recall receiving any documents re the latter.

**In relation to the UKHCDO meeting Manchester October 1983**

I do have a vague recollection of this meeting as I think that it was probably the first of many UKHCDO meetings that I eventually attended. I recall that there was a prediction of a very small number of AIDS cases to occur in the UK and that there was no proof of AIDS and blood products. There was a conclusion that there was no need to stop using commercial concentrates. This carried a lot of weight as I recall it coming from the acknowledged senior haemophilia experts with many years of experience of virus transmission. However, I also recall that there was continuing effort to reducing the risk of transmission by donors. I also

recall a very reassuring statement from Ken Clarke which I believe was that in Preliminary Report paragraph 8.63.

**What did I do to reduce risk of virus transmission**

I will do my best to answer a number of questions posed in this area.

It is stated that infection risk equates to amounts of concentrate received; this is in my view not the case. Paragraph 8.207 referred to in the Preliminary report is actually partly making the point that infection was not dose related and that dose might relate to time to seroconversion. There was clearly no direct correlation with dosage as patients who had had a single dose of factor VIII seroconverted whereas others who had had many does did not. There was also discordance between twins in this respect. This is not the case. Exposure from each infusion was great and depended on infectivity of the batch

There is a question about large amounts of commercial concentrate which I have already answered – the dramatic fall is obvious. The background to this is already answered.

I do not know whether or not Dr Ludlam circulated the 24th June letter from Bloom and Rizza. However, the policy from my arrival onwards was that mild/moderate haemophilia A patients and those with platelet disorders and von Willebrand's disorder should be treated exclusively with DDAVP and tranexamic acid wherever possible, and where lab result response had been demonstrated. However, it must be understood that this is not always feasible or appropriate. DDAVP is not safe in very young children or those with fluid problems or neurological problems. DDAVP is a vasopressin analogue which is not licensed and not recommended in children below one year of age. There is a risk of convulsions in children with brain problems, due to its interference with fluid homeostasis and so it should not be used in that circumstance. There is also a problem with tachyphylaxis in recurrent use which makes it inappropriate for many surgical procedures. Some patients get no response. In addition, some procedures and mucosal bleeds in severe haemophilia children can be covered with antifibrinolytic agents. These policies were explicit and I spent the first months in my job writing them down in a specific protocol book which may still exist. There were not electronic forms in this era. So far as I know these protocols were followed.

I am asked if I agree with the statement that the emphasis of the UKHCDO and Haemophilia Society "around this time" (which I am assuming means 1982-4) appears to have been strongly emphasising the use of commercial concentrates. My answer is yes, and the preliminary report gives a flavour of why i.e. that treatment was necessary and could be life saving and proof of transmission was uncertain and that local supplies were not yet sufficient.

I am asked if haemophilia doctors followed advice in avoiding non-essential use of blood or blood products. In one way I was unique in this respect as I was responsible for blood and blood product policy in three hospitals as well as in the haemophilia population. There was a constant need for vigilance in this respect as there was inappropriate use of blood products on a regular basis, particularly by surgeons who often attributed near-magical properties to products such as FFP and cryoprecipitate and whole blood. Most days we would be following up such uses and discouraging it, but there was great resistance especially from surgeons. This was only properly overcome years later with the much belated introduction of proper haemovigilance staff and procedures and reporting lines and the introduction of procedures such as SHOT reporting. Earlier introduction of such procedures would have certainly avoided some adverse incidents. I cannot remember specific detail but I recall patients in London who were bleeding following surgery who did not require massive transfusion and who had no defined clotting abnormality and subsequently developed Hepatitis C infection.

There is a critical question with regard to introduction of heat treated products. The preliminary report summarises the scientific background extremely well and I cannot give any more precise detail. This was a time of great uncertainty with regard to optimal viral

prevention treatments and of course these many false starts and eventual prolonged and difficult but successful processes inform the current greatly improved practices. The preliminary report documents this process very well and all I can say that when was in the middle of the process it was extremely frustrating and seemed as though one would never get there. Our aim was to prevent hepatitis, HIV and any other surprise that came around the next corner – although of course removing the next problem i.e. prion disease can still only be achieved by excluding the British volunteer population from plasma pools. This is still an on-going process which taxes doctors to this day e.g. West Nile virus etc.

**Lessons to be Learned**

I very much hope that this Inquiry leads to improved practice. I apologise for the fact that my memory is insufficient to deal in detail with events of the distant past. However, some memories of these dark times are still vivid; the most obvious being the fact that we as treaters did our very best throughout. I can honestly say that I knew of no instance where the other haemophilia directors and treaters did anything other than their very best; they are and were excellent doctors practising at the highest levels within the bounds of resources at an extremely difficult time.

The way that we feel however, pales into insignificance beside that of the children and families affected, about whom I think often. If there is anything that I could have done better, then I can only deeply apologise that I did not. I cannot without hubris at this juncture identify, other than with the benefit of hindsight, what I could have done differently. I will certainly take that on board when I see the final report.

Much has been learnt from this period. We now have recombinant prophylaxis and haemophiliacs are growing up normally; as Dr Peter Jones had jumped the gun and said in the early 80's. Supplies are assured in the developed world but the majority of the World's haemophiliacs get no or inadequate treatment still – that is the greatest problem. There are still funding problems e.g. there is now good evidence that adults would benefit from prophylaxis but there is inadequate funding. Haemovigilance is now an established specialty and is reducing errors across the board day by day.

What would have helped in that era should be obvious on reading the preliminary report. The treating consultant had to deal with the patients in the middle of what can only be called a maelstrom of uncoordinated events. Means have to be found to coordinate crises at a high level and to bring all agencies together. This really didn't happen and there was a dislocation between the parts of the UK which I hope has not continued. It seems wrong to me that this type of problem is not dealt with at the highest levels and UK – wide, otherwise the emphasis and the expertise pass you by.

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