

To

The Inquiry into Hyponatraemia-related deaths

Concerning

Claire Roberts

I have been asked to provide this report by solicitors acting for the enquiry.

I understand that my primary duty is to assist the court on the matters within my expertise. This duty overrides any obligation to those by whom I have been instructed or by whom I may be paid. The opinion expressed in this report is not partial to either claimant or defence.

Personal Information

I started medical training in 1970 at Clare College, Cambridge and finished in King's College Hospital, London. After my house jobs I started radiology training in 1979 and continued specialist training in Neuroradiology at the Radcliffe Infirmary, Oxford in 1982.

I was appointed consultant neuroradiologist based at the Radcliffe Infirmary, Oxford in 1985. My qualifications are: M.A., M.B., B.Chir., F.R.C.R.

My daily activity lies in the interpretation of images of the brain and spinal cord. I have very close clinical links with the specialists based in my hospital and my time is unequally divided between a number of different clinical groups including:

- Neurology and neurosurgery
- Paediatric neurology, neurosurgery and neuroncology
- Head and Neck radiology including ENT and ophthalmology.

My major non-clinical interest is in education. In the recent past I have been an elected member of the Education Board of the Royal College of Radiologists, Regional Adviser in radiology and a senior visitor of the Training and Accreditation Committee of the Royal College of Radiologists. I am co-founder and past Chairman of the British Society of Head and Neck Radiology. I was recently awarded the President's medal for services to Radiology and I am a member of the Health Service Ombudsman's panel of experts. My GMC Reference Number is 2312701.

My medicolegal practice is mainly devoted to issues of birth injury and head injury including non-accidental injury. I prepare reports for both claimant and defence in approximately equal proportions.

To give me background information I have been provided with the brief to the expert neuropathologist, Dr Squier.

Questions 62-64 are directed to my specialty of neuroradiology.

I have a CT scan performed at 05:30 on 23rd October 1996. It was provided on an optical disk and consists of a single digitised image of a sheet of film. This is not an image which can be improved or manipulated and is not an ideal way to view the original electronic images generated on a computer screen. It is, essentially, a digital photograph of a photograph and some detail will have inevitably been lost.

The scan was performed 3 hours after a respiratory arrest.

Q63a

There is no recognized "scale" of brain swelling. The general terms, "mild" "moderate" and "severe" or similar descriptive words are used instead. In deciding what words to use, the radiologist will ask a number of questions of the scan:

1. Is there descent of the cerebellar tonsils through the foramen magnum?
2. Is there space around the posterior fossa contents?
3. Is the 4th ventricle smaller than expected?
4. Are the surface CSF spaces around the cerebrum effaced?
5. Are the basal cisterns effaced?
6. Are the ventricles smaller than expected?
7. Is the density of the brain normal?

Looking at this scan I would answer in the following terms:

1. Not examined (this is poor radiographic technique)
2. No
3. Yes
4. Yes
5. Yes
6. Yes
7. Yes

I would use the words "moderate to severe" to describe the degree of cerebral oedema.

63b (i) and (ii)

I have not been given the relevant information to answer either question. I can say that the brain swelling is consistent with the increased brain weight noted in paragraph 41 of the brief.

63b (c)

The scan looks normal apart from the swelling i.e. there is no structural cause for learning difficulty evident. I would therefore anticipate a normal brain weight for age. Not uncommonly children can

have a perfectly normal looking but small brain but this is normally detected clinically as microcephaly.

64 a and b

Having read the clinical history in the brief I think the clinical information given on the request form is appropriate.

A handwritten signature in black ink on a light gray background. The signature is written in a cursive style and appears to read "Philip A. Owen".

24th August 2012