bb&Co. Brangam Bagnall & Co. Solicitors

~~Date:~~ ~~Ref:~~ File Name: Location:

4/5/2006. Rgh/1/134.

Dr Steen.

Read Deposition

Coroner.

Draft Death Cert given to Clerk
Read.
Fluids given 8pm - 2am.
up. 11.30 normal given. to 11pm.
thereafter not given. effect of ↓Na.
no issue of fluid management at that time
what should have happened after 121. Shown.
23 30. reassessment (clinical)
bld tests repeated
not personally on call.
fluid regime following 3am - support fluids re Drugs only
no maintenance fluid given
fluids restricted?
retrievable after 3am? Do not have Pcs to say definitely.
Condition not retrievable
11/30.
unsure; Co probably gone on for some hrs various contrib factors

Hildon House, 30-34 Hill Street, Belfast BT1 2LB Tel: [redacted]
Commercial Mews, 69-71 Comber Road, Dundonald, Belfast BT16 0AE Tel: [redacted]

Cerebral Odaema. recovery - can have residual Brain Damage.

@ 11.30 position may not have been retrievable.

Death - due to complexe combination c/o.

viral infection + seizures.

c/o due to renal reasons.

Dr Mc B right about referring to CKH?

yes.

X exam.

Consultant on take from 9am Mon - 9am Tues.

Consultant in charge of Claire

aware of C's presence 9am Tues.

Cannot recall when first saw Claire.

~~Cannot~~

1.10pm

Date: Ref: File Name: Location:

17/5/2006 RGH/I/134/GB Claire Roberts (Inquest)

Dr Ian Young - Cons in Clinical Biochemistry
Read both his statements
Dr Young felt this case should have been referred to the Coroner.
Usually takes about 1 hr for a result from the blood test to become available.

Cnr - Key issue - How should the death be formulated?

Dr Young:- 1 a) Cerebral Odema
b) Meningo Encephalitus / ~~Encephalopathy~~
(this was clearly present @ autopsy)
Status-epilepticus
Hyponatraemia due to excess ADH product

Cnr:- Where does yours differ from Dr Machonochie's etc...
This is just how he would formally formulate a death certificate.

Cnr: Should this case have been referred in 1996?

Dr Young: - Perhaps not back in 1996

Re the Inquiry? - This should be left to the Inquiry, not for him but doesn't personally think there are any particular lessons to be learned from this case.
This should be left to Mr O'Hara.

Cross x
Mr McCrea BL)
(Mr McBride)
Letter 17/12/2004 read 2nd paragraph
Mr Lavery objects, unfair to confront witness with a letter which he has not seen before.
Dr Young allowed to read the letter, as is Michael Lavery & the Coroner (letter received by C Hunt to Rule 17).
This para refers to "a care management problem". Dr Young asked to explain this comment. He did not use this term to Dr Mc Bride, he is fairly sure of this. He merely discussed with Dr Mc B whether this case should have been referred to the Coroner.

Mr Mc Crea - Perhaps this was Mr M B's view?

Date: Ref: File Name: Location:

Dr Young :- Needs to be asked to Dr Mc Bride. Chares death attrib. to cerebral odema. Hypon. was one of the 3 factors which contributed to that.

(K p 1 (b) :- Letter indicates ~~letter~~ hypon. was a signif. contribution to C's death. Should hypon. not be elevated to a greater level than 1(c)?

Dr Young. - 3 contrib. causes & unable to establish which 1 was more signif. than the other.

(W McCrea :- Were were reasons for restricting C's fluid intake? Do you agree?

Dr Young :- Yes there was "a progr. deterior. of her condition"
If C had have presented now her fluid management would have differed - she was just given standard fluid management there were reasons she should have been given less fluid.

Re fluid reading ie; Sodium level from 132 - 129

Mr McCrea:- What effect would that effect have, clinical manifestations?

Prof Young:- variety of symp, vague, insignificant but include headache
fatigue
lethargy
sickness

Mr McCrea:- Re C's clinical manifestations - all indic of a child's drop in Na levels?

Prof Young:- Yes, but more in keeping with encephalitus & various other causes
Focus in C's case was meningoenceph status elepticus. They are also in keeping with hyponat. but because of her status this would have been the priority.

Mr McCrea:- Look @ odd facts - could this not have been a child with dropped Na levels?

Prof Young:- Yes it could have been.
(132) Lower ref limit for serum Na level technically would indicate hyponat. but this does [illegible] is not freq attrib to hyponat.)

bb&Co. Brangam Bagnall & Co. Solicitors

Date: Ref: File Name: Location:

Prof Young:- Today, hypon would be thought about more.
He would list hypon. @ 1 (b) as contributing cause of death.

Mr McCrea:- C had potential for electrolyte imbalance?

Prof Young - Yes, he would agree with this. No inv. in Adam Strain case @ all.

Mr McCrea produces doc. from Mr O'Hara's w site re Adam Strain Inquiry lists guidelines for dealing with children ~~who~~ require hypotonic solutions ???

Mr Laverty objects to the intro. of this doc. Coroner & Mr L read document.

Mr Laverty objects to quest. Prof Young re circumstances follwg death of Adam Strain.

Mr McCrea:- Good clinic practice to take blood 1st thing in morning?

Prof Young:- At least one a day usually taken in Children's Hosp in afternoon.

Hildon House, 30-34 Hill Street, Belfast BT1 2LB Tel: [redacted] Fax: [redacted]
Commercial Mews, 69-71 Comber Road, Dundonald, Belfast BT16 0AE Tel: [redacted]

Mr McC :- Sh. blood have been taken that morning?

Mr L :- objects to this line of questioning.

Mr McCrea :- Refall in Na levels?

Prof Yang :- Impossible to say if this was linear, likely to have occured gradually over time.

Re fluid regime 22nd 8pm - 2am period (fluid overload)

Mr McCrea :- C's prescip 64 ml/hr was. 491 ml between 8pm - 2am
458 ml in 4 hrs = 114.5 ml/phr
which is far in excess of presc level of 64 ml/hr.
Is this not an excessive level of fluid, is this fluid overload?

Prof Yang :- This is not easy. No accur record of vomit/urine, nor its Na content.
I agree amt of fluid bet. 8pm & midnight was more than prescribed, but various medic. were given during that time. Peripheral edema was not obs. well

estabd by 9pm that evening.

Mr Mc Crea: - After 8pm, def sign. change in the Coma scale? She is after this time receiving @ least 80% more fluid than prescribed. Is there a connection between the two?

Prof Yang: - C. Odema takes sev hrs to dev so a change in fluid @ 8pm would not cause Cerebral Od by 9pm. Hyp is the crucial issue rather than the fluid recorded.

Re "simple" further tests ???
Prof Yang

- Blood tests? - def show a drop in Na levels
- Urine sample? - wouldn't have given any useful additional information
- CT Scan - not a simple test but would show cerebral oedema @ that.

Mr Lavery:- Re completing death cert?
Are you familiar with guidance
list for drs filling out death
certs?

Prof Yong:- Not familiar with the list, but
knows of it
If putting hypo on the list, would
want to provide some expl as to
the cause of it.
Hypon - dues to excess ADH
production is how he would term
it.

Re Public Inquiry?:- Some familiarity with
the other cases.
Familiar with TO Ref of the
Inquiry?

Prof Yong:- Have read them, but not familiar
This case doesn't fall under
the same criteria as the other
cases though.

Michael Lavery:- Should terms of reference be
widened to include C's case?
Needs to be considered by
inquiry, but all 3 contrib
factors would need to be
examined by Mr O'Hara, not
just hyponatraemia.