Lucy Crawford – Inquest Hearing 17/2/04.

Preliminary Statement by Coroner re history leading up to the inquest
Death Certificate issued
Publicity following R.F's inquest.
Coroner contacted by Stanley Millar re ?Similarities bet. deaths.
Repr obtained from Dr Sumner –
Coroner applied to A-General
Direction by A-General to hold inquest.
Prelim statement handed out by Coroner.

Mrs Crawford

Coroners ?
? Name
– Lucy Rebecca.
– Born Erne Hospital.
? Husb
– William Neville.
? Occupation
– Unemployed. [redacted]
? What
– death cert = cerebral oedema but never told what led to c. oedema.

P. Goods ?s
? Refer to Nurse Swift talking about other things
– Feel they weren't concentrating
? Could I suggest Nurse Swift nor her practice to talk about small talk
– Discussing Dr Maliks weekend

(2)

Inquest Hearing - Lucy Crawford

? You mention Nurse Swift cldn't give paracetemol
She had been given Calpol & you were told whthat thwas reason paracetemol wasn't given
– Think I have it in my st't – don't recall
? Are you aware bloods were taken & sent → lab.
Nurse Swift wld disagree that she said lab was closed – she wld have been aware it was open
? is your recollection of this part of conversation not best
– I was in ward – I felt I was put down by nursing staff & not listened to
? But lab was open
– I don't care if lab...
? L. was in small room & no of people there
– Yes
? Lot of activity Nurses were coming to & fro taking blood → lab & phonecalls & gone off to treat room to get tube
– Nurses talking among themselves & didn't understand what Dr A was looking for
? Got ET tube from treat. room
– I was concerned – listening to Dr A who was v. frustrated & cross
? Dr A was clear about v leaving
– I was her mum & shld have been there. I shld have kicked up more.
? In terms of people speaking 2 v were n. staff not have spoken 2 v.
– Not unless we requested info – felt we weren't told truth – may be they didn't know.

Inquest Hearing – Lucy Crawford

? Were nurses communicating w you.
– They were v. busy
? Ref to review.
– Which review.
? By Dr Anderson & Mr Fee. Were u asked to come to Trust
Coroner ~~didn't~~ indicated he did not want to go into the cplt procedure.

Brian Fee QC.
? Ref to Trust review. Did v receive letter 30/3/01 which indicated they had engaged ind experts

Coroner ? – Who was expert
– Dr Quinn – Altnagelvin
Mrs C – I was v. shocked he found nothing wrong w care & don't agree with his findings

Coroner – It is so much @ variance w 3 repts Dr Evans / Dr Sumner / Dr Jenkins perhaps Dr Quinn shld be given an opportunity to justify stance in his report.

? Ref to retention – Dr Evans as ind expert
? Have v. ever received explanation
– Not in writing.

Coroner ? – Wld you want to hear evidence from Dr Quinn
fGood – I haven't had opportunity to speak to Dr Quinn & shall revert to you re that.

(14)

Inquest Hearing – Lucy Crawford.

Coroner ? Did ps solr ask for repr – De Quinn
B. Fee — No,

MR Neville Crawford
– [redacted]

Coroner advised Dr Caroline Gannon refd to on list of witnesses. Dr O'Mara actually carried out p.m. – he is v. ill & ∴ unable to attend
Counsel obo Trust + family advised they did not wish to raise any pts re pm.

Dr Kirby.
? Coroner queried obs Round
– Her temp was raised. Heart rate normal
– Respiratory rate elevated. Floppy in her mums arms.
– She hadn't been drinking – vomiting + she was v drowsy

Dr Crean. Coroners ?s
– v. ill when I first saw her
Coroner ? Was prognosis bleak
– From time she arrived @ RBHSC really no chance she was going to survive
? What info did v get from Erne.
– I can't remember which notes came with her scans just got verbal instructns / photocopies or typed notes
? Sodium level @ Erne admissn = 137.
– Normal limits whenever drs got that sample taken

(5)

Lucy Crawford decd – Inquest Hearing.

? @ 3am in Ene sodium level had dropped to 127
Is that signif – threshold onset hy ponatraemia = 128
– I have seen many children w lower sodium level but concern is rate @ which it dropped

? Survival @ level 127 is possible
– Yes children even w level @ 120 survive. The rate of fall is crucial.

? Might it be sodium level had dropped further before leaving Ene
– Impossible to know exactly what happened – need to know what fluids given @ resus. Fluids w high sodium wld have kept it.

– Catastrophic event preceded obs – pupils fixed & dilated
? Is catastrophic event survivable
– You have evid brain stem involver – situ unretrievable

? By time transfer situ not retrievable
– I feel that it was " "
– Children can develop seizures before event & you can get little warning
You can get rapid
– Yes. Children can deteriorate v. quickly indeed & we need to reassess treat on reg. basis

What form of reassesst.
– Vital signs/effect of treat given/urine output
Why do u think change
– Wld depend on treat given – fluid infused @ Ene
– Can also be due to diabe... ? – condition where children pass lot of urine – can be a combination of factors

? Did you feel gastroenteritis underlying cause
– Certainty a viable working diagnosis.

(6)

Lucy Crawford – Inquest Hearing
? Heard death cert → c. oedema.
– Don't think underlying cause given
Coroner asked family be bring a copy of death cert.

? Having seen all expert reps what do you think cause was
– Managing young children can be v. difficult.
Fluid therapy not easy
If L's fluid manager had been handled in a different way outcome may have been different
? What wld u have put on death cert ~ all info
– cerebral oedema. Cause of c. oedema was fluid regime she was on.
? Madrit ~~cause~~ crossed threshold hyponatraemia
– Wld put hyponatraemia @ 1b.

– Managing ill children can be very difficult.
Coroner refd to new protocol by Dept following other inquest. Dec confirmed he was involved –
– We didn't try to prescribe a partic fluid becos every child different & needs

Significance of bowel motion.
– I am not a paed but further end of gastro upset.

P. Good Qs ?s.
Ref to Mr Evans repr. & his point no entry re weight on admissn.
Ref to weight @ 8am on 13/4th Nurse Murphy recorded 9.8.

Does yellow chart record fluid. & does it show.

(7)

Lucy Crawford Inquest Hearing

period 9am → 9pm · shows iv. intake 1183
For next 12 hrs - 451 = input 1414 265 = output.
Also ref in notes to DDAVP

- It is a drug used when pts have diab. in. & they have brain insult & pass lot of urine.
Helps kidneys to work in a more normal way
Given to L. on 3 occasions during course of day
No records of admin on full day

? Fluid retention
- To make kidneys work in more normal way

B. Fee ?s.
? Gratitude to you & RBHSC staff from family.

- My belief situ v.ctr. before transf. to RBHSC.
Re fall in sodium level - rate of fall v. impt. - also put fwd by Dr Evans. Can I suggest u have no recollection re avail rec on transfer - once v wld have become aware of findings - levels - 137/127.
v wld have been anxious to get records re fluid manager
- That wld have been correct
By looking @ rec cld ascertain what dehydration problem was, amt of fluid ... understanding of fall v. impt becos L. was transfd & we have to explain to parents.
? Mrs C says v indicated anger/frustration notes hadn't come through. Is it likely notes most interested in = fluid manager notes.
- Possible. Anger a very emotive term - Having fluid

(8)

Inquest Hearing ⇒ Lucy Crawford

- records - v. impt.

Coroner ? Relatively easy to fax through
- We have done that on occasions. We can also contact hospital & get an oral a/c.
- Never usually a problem sending records.

- Depends on clinical condtn of child - with complicated situs - may need to go back to hospital

? Fluid manager rec shld acco
- Not necessarily - wld not always have them
? Wld you not have expected
- Only if they thought issue problematic.
? Wld any paed not have consid "
- Can't comment on manager @ another hospital - it wld ring alarm bells - manager v. difficult - upsetting for med/nursing staff in this situ - easy to omit things - photocopying fluid chart not highest priority @ time

- If relevant rec not sent cld have been faxed to arrive
- Only v. occasionally is it faxed before arrival of child
? Did you ever see fluid chart
- Can't recall.
? Ref to Eme notes.
Change from No 18 ⇒ normal saline.
? Does record 100 mls surprise you 11 am ⇒ 3pm. or concerning
- Not fluid manager perhaps I wld advocate. With alert @ 3am ⇒ change.

(9)

Inquest Hearing - Lucy Crawford.

? Re records which shld exist re fluid. If it was considered there was dehydration wld you have expected assessr.
- Fluid manager in sick children v. difficult.
- Calculations & ongoing fluid manager shld be recorded
? You won't find anything other than info u described - i.e. on chart recording drinks & running fluid.
? One of conseqs - there was a misunderstanding/disagreer among staff @ time re manager.
- I can't comment
- By writing record down u show u have gone through process in appropriate way & everyone knows what action plan is.
? Can I suggest 0.18 soln was wrong soln to use
- Wrong - difficult to use soln for maintenance & deficit.
- Nasty for replan Think its more to do w deficit loss - that's where my major issue would be rather than just use one fluid for maintenance & deficits.
- Well recog. any fluid w normal/low sodium content can produce hypo.
- Using one fluid for maint & deficit can lead to develop of hyponatraemia.
- When looking @ protocol I was v. keen not to come up w one fluid to do everything.
? Nothing in records to suggest problem approached in that way
- Can't see anything in records.
? Lucy was given wrong soln & given wrong dosages.
- I would have managed things differently & wld agree it was inappropriate.

(10)

Lucy Crawford Inquest Hearing

Dr Sumner.

Generalised c. oedema = generalised swelling.
Writing down ⇒ going clinical situ @ time + medico-legal reasons.
Dr O'D thought she was getting 30mls but she was getting 100mls.
Appropriate fluid = Hartmans / 0.9.

? How wld you write out a death cert
- died effectively @ time - acute cerebral oedema.
? Underlying cause
- on basis of reading of notes - hyponatraemia.
? Any further cause
- I take it iv fluid therapy being given for gastroenteritis
C. oedema caused coning.
Gastroenteritis - contributed ⇒ wldn't have had fluid therapy if she hadn't had gastroenteritis.
? Any aspect of Dr C's evid w wh U book issue
- No.
- In agree't incorrect to use same fluid to cover all things
- In agree w basis of both repts. Dr Evans/Dr Jenkins
- Basic principle - defect losses shld have been replaced by higher sodium
? How seriously do you view not writing down
- Good clinical practice to write down + show thought process.
? Does prof body have any protocol
- Not aware of it being written down but general

(11)

Inquest Hearing – Lucy Crawford

- Not practice to write prescriptions down – same as prescribing antibiotics
? Potential for misunderstanding when not written down.
– Rate of infusion absolutely crucial
? Communication w patient of L's age – what wld physical symptoms be
– viral infectn – tummy likely to have been tender
– vomiting makes u feel awful
– effect of dehydration – lassitude.
? Wld brain swelling be of sudden onset
– Time after start of infusion. Not a clinical manifestation of that.
?. Before she reached moribund state wld she have had pain
– Consciousness wld have been dimmed
? What wld ur fluid regime have been.
– work out deficit taking a/c of body weight.
– would use Hartmans soln to replace deficit + No 18 for maintenance. There isn't one fluid u can use for whole spectrum.
? That is reflected in the protocol
– Yes.
? Previously expressed view, hypo. Cinderella.
– Expressed view fluid manager – Cinderella – not a lot written re it
– Flurry in 50s – pattern then nothing much until last decade.
? More articles now.
– Yes
? Ref to Dr Jenkins article
? Keynote papers in mid 90s by Prof Arieff San Francisco. Mortality hypo/coning/c. oedema was

(12)

Lucy Crawford - Inquest

@ horrific rate but less here in UK as there was a more conservative approach in UK.
- several other cases where this was a likely part of mortality.

Patrick Good BL.
? Broadly in agreed w Dr Evans
- Yes
? Ref to weight @ admissn & @ pm.
- It's a puzzle
? Ref to Dr E. referring to receiving more fluid than prescribed
- Weighing in hospital of children isn't accurate
- scales full of inaccuracies.
- Lucy weighed more when she arrived in Belfast.
- reduction 137-127 cld take place w Dextrose/ Saline
- not sure if u have to look @ additional
? In terms of weight diff Dr E didn't appreciate weight taken in Belf @ 8.
- She was losing fluid & recvd 900mls @ Erne & 150 mls oral fluid. If weights were accurate there is a gain of 700 mls - that cld be correct w loss.
400 mls Dextrose/saline could create problem.
? Insinuation in repr further fluid given which was not recorded
- Only other fluid L cld have been given = 100mls in bag - no evid other fluid
- Impression reading notes - with change - running freely & given over 1 hour & she had 100mls per hour - 4 hrs.

(13)

Inquest - Lucy Crawford.

? That wld a/c for difference bet 2 admissn weights.
- If accurate 700 mls - but she was continuing to lose
- Don't think more given because that wld involve more bags being put up.

? Were there similarities bet RBHSC / R. Ferg / L's case.
- Fluid admin was inappropriate
- Scenarios different ① 1st case - renal dialysis - intra-operatively.

Coroner - c. oedema.
Dr Summer - consulted about protocol but didn't attend meetings.

No Deptmental protocol in NI before protocol after RF death
- That's correct. Guidelines - splendid. Could happen in NI only - because communication is so good
? Ref to Dr C's letter 25/3/02 - is that 1st time Deptmental concern expressed
This initiative is here 2 years but in England there isn't one - this is an unattractive area of medicine.
? Insofar as we have shorter communicn chain its v understanding 1st time concern expressed = this corresp
- Yes
Seems to be imparting info.
- Reminding them re what they learnt @ med school
Focuses
- Yes warns of risks. Reminding what they shld know.

(14)

Inquest Hearing – Lucy Crawford

? Not more than a reminder
– Its a letter which is reminding u of what u know
? letter outcome multi-discipl. group.
– Good this came out of death of 2 children – it was a consolidation & update.
– These lessons are learnt in med schools.
? Insofar as guidance came too late – bring issue into focus not previously in focus.
– Yes I agree

Coroner – regret Adams death wasn't catalyst
Dr S – Adams People thought A. different beces intra-op but mechanism same.

Mr Fee's ?s.
? Indicated dilu. hypo known of for long time w 2 deaths need to bring focus.
Manager of fluid long recog matter of imphance
– Yes
? Attempt shld be made to assess extent dehydrn.
– Yes
? Fomal assessk & shld be recorded
– Yes it shld
? Doesn't appear this happened
– Measured capillary refl. noted tongue moist – looked @ rel. things but didn't record
? More than a matter of form
– Think its good practice to do that.
? Bad practice if u don't do it
Dr S laughed.
? Dr shld work out formula – deficit & assess how to replace.
– shld be recorded definitely

(15)

Inquest Meaning

? Mandatory to record prescription
– Absolutely mandatory
? On a designated chart
– Yes.

? Given what we know from rec is there anything to suggest No 18 appropriate
– Totally inapp. in these circs.

Coroner ⇒
– If there hadn't been a misinterpretation of Dr O'D's rate – Lucy might have survived.

? Combination of 2 errors – failed to address problems & put her on road to catastrophe which occurred.
– Yes

? Is it poss to be precise when event occurred
– Gradual process brain swelling until compensatory measures used up & pressure then builds
– Brain poss swelling for 2 hours prior to seizure.

? At 3am 3rd error – decision to change fluid & apply 9% saline on free running basis – allowed 500 mls
– Fundamental error – shld not be free & running fluids – shld never be allowed to happen
500 mls – 3/4 L's blood volume.

Totally inapprop step exacerbated situ.
– Yes is my reading.

Also 4th failure to monitor
No end of progress of rehyd. took place – in truth

(16)

- I don't know how often that has to be done — maybe 6 hrs
Nurses wld check fluids running
With hindsight shld have been done but times not done.

? How often wld you expect nursing obs
- Initially ½ hourly — if things improved 1 hourly
- Wld depend how busy nurses are / staffing / no of pts

? Difference bet v + Dr Evans re weight.
- Don't need to look for more end re cause.

? Situ where records unsatisf that matters might have been worse
- Bearing in mind weighing children inaccurate.
Weight @ RBHSC prob. accurate + situ was as it was.

Coroner
- Issue may be misinterpretation of fluid regime
- Jones suggested by Dr O'D
- That is conjecture

(17)

18/2/04.

Inquest - Lucy Crawford

DR EVANS.

Coroner qiery
No localising signs = no abnormality chest...

Coroners Qs.
? How wld u formulate cause of death.
- Agree with sequence given by Dr Sumner.
? Repr shakes standard of care woefully substandard & u are v. critical of record keep & v say given more fluid than prescribed considering weights. Ref to Dr S saying hospital scales v. inaccurate.
- Accept Dr S's point. Now have electronic scales avail. @ rel. small amt of £
? Do you still stand by view re disparity of weight.
- Now have 3 weights - v. difficult to accept all accurate.
- she received more fluid than she shld.
Weight @ pm unclothed
- Yes.
- Very rapid change in electrolyte balance caused

Hyponatraemia caused by excess dilute fluid

Dr Sumner - Think it is [illegible] a sodium mechanism.

? Do you feel ur analysis that L given more fluid
- If we look @ fluid given - that was a much anyway combination of speed @ which fluid given & too dilute

- It was an awful lot of fluid & the wrong fluid
- If she weighed 9.8 @ RBHSC - then it probably

(18)

Inquest - Lucy Crawford

was correct.
- Clearly a breakdown in communication bet med & nursing staff. Respons of med staff to write down prescriptn.
? Is there any matter v wld take issue w Dr J & Dr S
— No not really

Patrick Good BL.
? Weight @ 9.14 & 9.8 @ RBHSC. Is it ur now that weights consistent w fluid intake
— Yes.

? Is it apparent record of fluid taken given @ time accurate
— Yes
? Ref to Dr Crean saying looking after young children diff
- Yes that's why we have paed specialists.
? You are critical of failure to record dehydr but notes show that it was considered
— They recorded CFT H/w big difference bet mild dehydration & life threatening dehydration. Need to look @ pulse rate / BP / urea / ↓
They did look @ mucosa - moist ∴ she wasn't severely dehydrated.
? On calculations you used 7.5%.
— I was trying to be generous to hospital manager.

Refd to Dr Jenkins repr - penultimate para "Over recent yrs."
- Wld v agree
- I am in 25th year of consult practice & I have not used 0.18 in these circs. There is nothing new 2 me in this. We got rid of 0.18 recently but I do not consider approp to use 0.18 even in 90s.

Patrick refd to recent Dept guidance/protocol.
Dr E confirmed he was not aware.
Patrick refd to state of knowl in 2000.

- Big difference in using 0.18 in some cases & in Lucy's case
- Don't think any reas body of med opinion in 2000 or 90s wld have used 0.18 to treat Lucy

Coroner refd to Dr Sumners evid – not new practice – just a reminder.
Slight variance bet Dr Jenkins & Dr Evans re their experience

- DR J does not justify in his rept the decisn to use 0.18.

? You are critical re resus/equipment but say did not affect paric outcome
– Yes
? Factual basis for that view
– transfer to ICU shld have been done quickly
? Is some of ur info coming from Mrs C's st't.
- I wld need to check nursing notes.
- Record Don't think info sufficiently robust
? Is it info or
- Don't think any thing done partic well
? That is a generalisation. Again are u basing what u say on Mrs C's st't?
- I have recvd st't – didn't look like this but probably same info
? You are relying on one sided info.
- In my experience parents have a v. vivid a/c of

(20)

of what happens their children even 20 yrs later.
? Basis of criticism - Mrs C's st't. & is one sided
Coroner - Based in part on Mrs C's st't
DR E - I would be happy to accept Mrs C's a/c is as it was
? As she understood it
- As it was

Mr Fee's ?s.
? U are saying 0.18 - Dr J may have had diff. experience
But inapprop to use in L's case
- Yes.
? Dr S said 0.18 shld not be used to make up deficit
- Agree with that
? In terms of dose being fundamental error
- Yes.
? Re rate of infusion - Dr S said 2nd fundamental error
- Absolutely.
? Description 3rd fund error - 0.9% soln free-running
V. very serious mistake. (.....missed a ? here)
? Absol. mandatory to have clearly written up prescript said Dr S.
- I agree.
? Query any publication which sets out - u refer to Advanced Paed Life Support.
- 97 edition - also update 2002 or 3.
? Does it give direction re fluid
- Yes.....
How widely used is that textbook.
- Doesn't sit on every childrens ward.
I have not dealt with case of cerebral oedema

(21)

Inquest - Lucy Crawford

- as seen from gastroenteritis before but I have seen it from diabetes

Ref by ME Fee to letter from Spemin re outcome of review
? Have u seen the repr from the ind consult
-No
? If there was a repr which excluded improper care what wld yr view be
-I would be astonished.
- If Lucy had survived I wld still have been critical of management - basic errors not as result of lack of info / known.

Coroner - Having heard end of Dr Sumner & Dr Evans I have concern re view expressed by dr @ Alnagelvin - I am going to write to Med Director of Alt & HSO

Dr Anderson

- Coroner
Why was there no approp ventilator.
- At that stage we didn't have one - we didn't have a paed ICU
Children sick enough to require ventilation are transfd
Since then we have acquired a suitable ventilator.
? Since this partic death
-Not sure
? Very difficult for parents to be told transfer reqd
- Not acceptable situ.
? What wld have happened & did need a paed ventil & yr efforts to use adult ventil didn't work - only

(22)

Inquest Hearing - Lucy Crawford
option 2 transfer child by ambul/helicopter...

Dr Crean said 2 all intent & purp L. died @ Erne
- I would agree with that.

? Seems to have been 3 hr period bet crisis & ambulance.
- I came on scene @ 3.50 & ambul ordered → 6.10.
? When was ambul ordered
- Some time before.
? Is it a special ambul.
- Not as such - we bring monitoring equipt from ICU.
? Did u think delay in ambul.
- No. I intubated took x-rays took her to ICU organised cover.
? What wld have happened if someone cld not go with her
- She could not have gone until there was cover.
? A child could die waiting 4 cover.
- Yes that is possible.
? Wld it have made any difference if u had gone
- Ongoing treat in ambul. would have been exactly the same.
? Ref in Mes C's st't to helicopter
- One experience of that - can be difficult - weather conditns - no landing pad @ RVH - have to travel then by ambul - ~~xxxxxx~~ takes time 2 organise with army
Dr A. refd to group sitting @ present → planning stage of paed ICU @ EBHSC coming out to pick ill children up.

? Ref to notes
- Practice to write letter - Dr O'D did write letter.

(23)

Inquest Hearing - Lucy Crawford.

? Were u able to form any initial view as to what was wrong w L.
- It was puzzling @ start. Fit might have been due to pyrexia. After a while I was made aware of lab results & hyponat. then considered an issue. Hypo not my 1st thought.

? Who is respons for fluid manager.
- Anaeth wld only be respons intra & post op & in ICU. On wards would be surgeons/physicians stimes in consultation with us.

? Were u consulted on L's case
- No I was on call but it's not something I wld be asked about.

? Is there more need to consult re child
- ?? response? May? agree??

? Do u have any comment 2 make re fluid given 2 L?
- Would agree too much of wrong fluid given Initial 400mls certainly.

? Can I take it nursing/med staff taking it into a/c
- Yes I agree with it.

Mr Fee

? You have candidly agreed 2 much fluid & wrong fluid Wld you also agree o.g
- Not sure how much had been given b4 I arrived
- Volume wld have been wrong

Coroner? Any concern re given free running
- Ideally thro. infusion pump

Mr Fee? Given these 3 faults u wld not attempt to stand over care as approp/adequate/proper quality.

(24)

Inquest Hearing – Lucy Crawford

– Having read various reports wld have 2 agree treat not up to standard

Crawfords wish 2 make it clear no criticism of v.

? Fuss re equipment. Does that ring a bell with u?
– Yes

? Diff w ventilator. Prob w tube?
– Might have been prob w suction catheter – there were a couple of difficulties.

? Ref to results top p2. Be n's repr
– Info given orally 2 me – didn't see document

? You indicated hypo wasn't @ forefront of mind but when lab results came back hypo flagged up.
– Yes.

? Are v aware personally that Trust said wrong fluid & 2 much given
– Not aware

Coroner – that is a ? for a med director

? When did you get a paed ventilator
Possibly within a year – not sure if it was in response.

? Problems set out by Coroner – doesn't exist 2day
– Yes

Coroner – There are other probs

? While resus ongoing – lot of activity
– Chaos

? Organised chaos
– Yes

? Family cld perceive this as panic rather than organised chaos
– Obviously they were becoming distressed &

(25)

Inquest Hearing – Lucy Crawford

I suggested they go outside until I got things settled. Was Rm. Apologise if I upset them.

? In that regard was this resus diff than others
– Not really. Not pleasant procedures to take part in or observe.

S/N Brid Swift.

Mr Mumaghan
? Were u 1st to assess w Dr Malik
– Initial assesst by Nurse McDowell
? U. were involved in treat rm w Dr Malik.
? Signif prob getting veins – @ least 11 times per Mrs C.
– Tried once only unsuccess. in my.
? Did Dr M discuss with u re calling Dr O'D
– Usually call consult if 3 unsuccess. attempts
? Any relation how long it took Dr OD to arrive
– Don't know. Might have seemed long + not been
? Were u there when line put in
– Yes
? Instructed by Dr OD to run fluid
– Yes
? Dr M there too
– Yes
? Who was in chge
Dr O'D.
? 100 mls fd L. passed urine
– Yes
? Responsy for presc. fluid → clinicians – Yes.

(26)

? Who was respons for recording fluid
– Dr Malik was respon for recording
I saw Dr M w fluid bal chart
? Chart no ref to rate Is it unusual
– Not @ that time (??)
? Chart has proforma form which has column to invite rate to be inserted
– Unusual for rate not to be written down
? Why was it not recorded in this case
– Can't explain
? When wld ur signature have gone down.
– when I got fluids checked w Dr M.
? In respon Total = 400mls – in ur experience given weight + age is that
? not allowed by Coroner
? No involvt in resus
– No
? When did u become aware catastrophic
– Didn't know that a.m.
? Were u contacted by ur employer after event
– I wrote st't.
? Was Dr M there for some time
– Yes
? Did he prepare st't
– Yes.
? Impt to record fluid rate
– Yes.
? It was Dr O'D who gave instructn
– Yes

P. Good ?s.
? Heard evd from Mrs C re talking w Dr Malik

(27)

Inquest Hearing - Lucy Crawford

- I do not speak about my personal life in front of pts / drs.

? Can u recall such a conversation
- No

? Can u recall telling Mrs C paracetamol cld not be given
- No.

? Also evid u told Mrs C lab closed
- No. If lab closed someone on call.

? Was there period u were absent when Dr M cld have made other attempt
- I wasn't out of room - I wouldn't have allowed Dr Malik

? Did death have effect on nursing staff
- very bad effect

S/N McManus.

? Kardex completed by u re what u were told prior 2 0.55
- Yes

? Who wld have passed it on
- Whoever was performing the care. - cld be a range of people.

? Who told u re fluid 100 ml.
- Probably S/N Swift.

? Fluid maintenance / manager - respnsy dr
- Yes.

? Mrs C - said sense of panic.
- There initially @ resus - until it started - always a rush to a resus - only certain amt of equipt.

28

Inquest Hearing - Lucy Crawford

P Good BL
? In terms of resus u were on ward @ time - wld have seen people moving about.
- Yes
? Resus trolley - 2 items - when exhausted where do u get more
- Treat. room
? X-ray
- Radiographer bleeped
? BP monitor
- get it in treat room
? Was drug got
- Got from ICU.
? Wld you have tel. calls
- Yes labs. More than one call to get results rapidly
? Peoples perception may be different
- Yes. Must b v. difficult for parent 2 watch..

E/N McCaffrey.
No ?s.

Missed a witness - Theela Jones.
- per P. Good did not touch on fluid chart.

S/N McNeill.
- Kevin Murnaghan
- Other than transfer sheet was other docus
Drs letter + transfer sheet went. We thought we weren't going to 9am + then went @ short notice so no time to photocopy records.

(29).

19/2/04.

Inquest Hearing - Lucy Crawford.

Dr Manrachan.

Coroner's ?s.
? Dr Anderson expressed view fluid replacet inapprop & failure to monitor rate of infusion which was incorrect.
Ref to Dr Sumners/Dr Evans evid.
? How cause of death shld be for
1(a) c. oedema
(b) hyponatraemia.
(c) excess fluid (2) gastroenteritis.
Dr M - Agree with that.

Dr Crean will say dead when left Erne
- on clin. assessr & scan no evid brain function.

Mr Fee ?s.
No criticism of treatment @ RBHSC.
? Do you agree soln incorrect.
- In general L. appeared encephalopathic
Widn't be an expert in fluid manager but wld agree more concentrated soln shld have been used
Haven't calculated rate.
Dr A. accepted standard @ Erne substandard - Do u agree
Coroner objected to ?

P Good
? U. do not consider urself an fluid manager & haven't carried out calculations
- No.

(30)

19/2/04.

Inquest - Lucy Crawford.

? P. Good refd to records RBHSC originals - records faxed
- Dr M. may not have seen records.
? Records were there before Dr M's vr exam
- Yes.

Dr Jenkins.
Coroners ?s
Ref to cause of death ⇒ Dr J agreed.
Ref to other deaths. - Death of Raychel taken in conjunction w 1st death catalyst for guidelines
Dr J:- In/around time Lucys death changed practice - Antrim.
Ref to article in Ulster Med Journal + letter in UK Paed Journal.

Nr Fee ?s.
? Took 3½ hrs for line to go in
- Time acceptable depends on level of dehydration
Don't know how much oral fluid tolerated.
What I have seen suggests 5-7% dehydration so iv. fluids in many countries wld not have been considered
? If attempt to intro. line @ 7.30 + achieved @ 11 - is that
- If a jr dr attempts - if attempt unsuccess have to make judge seek help or defer if can avoid giving fluids. Dr wld need to make assess dehydration. .....

? Do you agree formal assess reqd
- Yes.

(31)

Inquest Hearing - Lucy Crawford

? Do you agree good practice to write down calculn
— It has not been my practice for 20 yrs — would do it in unusual cases - would not say it is bad practice to write it down.

? Term advantageous
- use of term advantageous — advantageous to me to reach conclusions

? Dr S has said mandatory to write a proper fluid prescriptn on designated chart
— No hesitation in agreeing that point.

? Ref to review + ind experts view.
P. Good made submission review not rel.

? Ref to letter from Trust — care not inadequate/poor standard. Do you agree care v much substandard
— I agree care sub standard

? Solution used re maintenance — No 18. Ref to recent move. Dr S + Dr E say inapprop to use No 18 here.
— Would not agree
? For deficit No 18 incorrect
— I agree.
? Both Dr S + Dr E say it didn't come to light w protocol
— That had not been well clarified in paed lit.
? R v saying degree of uncertainty in NI where children presented w symptoms
— There was a lack of understanding — not saying universal - know not as widespread as it shld

have been & thats why working grp set up to bring it to wider audience.

? Dr S & Dr E – say learn it in med school...
Dr J I wish that was the case but it is not from

Principles of fluid managet taught – learn applicn in practice.

? When did u compile ur repr.
– PG clarified 7/3/02.

? Ref p2 – solution used is commonly used 4 maintenance fluids. – suggests not common to use
? In 2000 paed practice to use No 18 as deficit
– Initial estimate dehyd. & if not severe – single dose No 18. – was common practice.

? Coroner
18 soln used as a catch all.
– in a young infant who was not severely dehydrated

Not something you had indicated in your repr
Coroner – I have taken that from the repr.

Why did you not include in repr
– I don't see any contradiction.

Distinction bet maint. fluid & maint & deficit.
~~– Don't think there is one~~ This has been teased out in the repr.

(33)

Ref to paed ~~on~~ book extract. – 1999. by Dr Jenkins.

Mr Fee refd to Adv. Life Spt refd to by Dr E. –
ref to needing deficit fluid
– Aware of recommendation
– Different views on this topic – different views in paed text

? Nothing to suggest in text
– said it had to depend on clinical picture.

? Given what u know re Lucys needs – u. agree No 18 inapprop.
– Initially bolus 0.9 shld have been given but thereafter arguable to continue w No 18.

? Ref to 3rd page deposition .....

? underlying cause death – excessive dilute fluid
– Yes

? Confusion bet staff → "" extremely grave state of affairs
– Agree.

? Who is respons for writing up prescriptn
– Dr.

? Dr who decides on drug regime
– Yes.

? That prescrp. incl. fluid & rate
– Yes.

(34)

Inquest Hearng Lucy Crawford

? If s/o prescribes & doesn't write up is there any fall back to avoid disaster
- Normally written on fluid/prescriptn sheet & nurses will record on sep sheets fluid balances.
? R u saying we don't have 1st record but 2ndry records confusng.
- I found them difficult to interpret
? U agree w Dr S & Dr E - rate of fall - sodium - crucial
- Think condition not well understood but rate of fall impt.
- Agree having heard Dr H's evid rapid fall in sodium caused cereb oedema → death
? What was it in Dr H's evid made u decide
- other investigns which he carried out
? Unlikely L's death used as a catalyst becos Trust
- RSMSC had concern & this came to us in Autumn 01.
P. Good ?s
? Were u a member of wkng grp - wld u have had looked @ world lit.
What was uncertainty
- Standard texts did not bring out distinctions we have discussed this a.m.
Clear refs in anaesthetic lit - not read by panel.

Coroner refd to Dr Arafs art.
- I wasn't aware of that until this started.

- we set out to do a protocol but only able to produce a guideline. as there are different approaches.

(35)

Coroner - Need to focus on individ child & assesst of needs.

? U have identified

- No 18 commonly used & lack of clarity re diffs in use in cort circs.
- Articles have appeared in N America 2003 & UK - in Lancet Oct 03 suggest this was not well understood or these articles would not have been necessary

? Lucys case - @ time of admissn level 137. Degree of dehyd which DR S & DR E place in band 2 5-7.5% - agree

? How wld u appr

- made estmate of any degree circulatory deficit - CRT capillary refill time & there was deficit so I wld have given single bolus Then wld have worked out diff fluids reqd. Sodium level wlin normal plan - my calculation would may well have led me to use No 18 in correct volume.

? Wld you address ongoing losses

- Impt to monitor & taken into a/c in proper presenp.
- Specifically in infant of this age - no deficit sodium - wld have used No 18.

? Generality fits wlin Working Grp Research

- Yes.

? Ref to Dr Evans repr. para 41.

- Falls wlin range of opinions - would not be my approach - amt of sodium wld be in excess of that reqd for child of this age over a 24 hr period. DR E is going for a simpler solution -

(36)

easier to administer.

? He is generalising – averaging more
– Yes

? Diff approaches can be taken
– Yes.

Coroner ?

? Fluid prescriptn was flawed
– Initial bolus of 0.9 – if that had been given. could have continued with No 18

? Some criticism re resus procedure
– considered Erne notes re time of response – senior staff avail w/in short period time – transfer → adult ICU & transfer → Bfast – felt senior staff had responsed in an approp & timely fashion. On info avail to me no criticism.

(37)

Inquest Hearing - Lucy Crawford

Amanda Wylie BL applic for adjournment. – protectn of reputation not adequately ~~recovered~~ Rule 9(1)
Mr Fee strongly oppose applicn – outrageous – has legal rep'n already. Refd to 3 repts. – know what way this could go
Mr Good BL support applicn. Seek balance – no proj aq family may be proj to Dr O'D.

Coroner – issue fairness to protect Dr O'D.
Not acceding to request for applicn for R11. 3 reasons
Protectn afforded by Coroners legislation
) At last minute faced w applicn to get different legal rep'n & get different evid
) Don't believe adjournt fair to family
) Not in interests of justice.

Dr O'D – has 2 courses
1) Proceed to give evid as per rule 9.
or.
) For him to say anything @ all might incriminate him.

Coroner read out Dr O'D's original statement.

L. R.C. 14/4/00 @ RBHSC
1(a) C. oedema.
(b) acute dilution hypo.
(c) excess dilute fluid
gastroenteritis.

~~Dr O'D is not a therapy compounded report~~

(38)

Inquest Hearing - Lucy Crawford

Coroner

Under R 23(2) authy to refer to prevent further death :-
Body usually write to Minister w responsly for Health & CMO.

Wish to hear submissions as to whether any power writing again to CMO or any other body.

Mr Fee QC.

There are bodies to wh. u cld consider referring this to
Our pt clear evid partic expert evid wh. we cld suggest fairly abismal care - compounded on part of Trust to recognise mistakes made & prevent reoccurrence. Year almost after she died - Trust letter - no evid of lack of quality of care - difficult 2 understand - knowl. weighed heavy w family.
Over 4 yrs have been trying to find cause of death - doors closed in their face. Mentioned civil proceeds -
1st admissn = evid by Dr Anderson yesterday.
Failure of Dr O'D to give evid - compounded things.
More info CMO has the better equipped they will be to deal w issues.
Family want to make sure mistakes recognised.
& no other family goes through this.

Suggest also case shld be refd to GMC.

Possibility of referral of papers to DPP.
- entirely happy to rest with Coroners decisn on this point. Family don't want to be vindictive ag.

anyone – becos Dr O'D did not give evid they are not in a position to give view on this.

Coroner – Test – if a criminal offence MAY have been committed.
Family are not asking 4 that to be done. Becos Dr O'D. didn't give evid they aren't in a position to press 4 this.

Mr Good.
Issues raised ~~both~~ communication bet Trust & family.
– refd to repr / renew / corresp.

"Action shld be taken"
Look @ CMO corresp. – action was taken
Lessons have been learned
Don't think it is necessary to invoke Rule 23

Referral to GMC – what has been self evident –
Protocol now widely available. – info has been promulgated

Re referral to DPP – whether omissions outlined in or verdict – errors which are errors of judgt are not issues – criminality

Coroner – Before I refer to DPP have to be satisfied may be gross neg.

Mr Good – Case does not satisfy test.

Coroner ⇒ Altho protocol & circulated widely – nonetheless

inquest involves death 17 mnth old girl – sending papers to cmo may raise some other issue which can be addressed.

Reference ~~should~~ will be made to GMC.
Threshold for referral to DPP not met :. not referring to DPP.
PSNI can operate independently of a Coroner.