Date: Ref: File Name: Location:

25/4/2006. Claire Roberts Inquest. 16th/1/134.

132 Could not explain seizure + lethargy -N- stands for normal biochemistry -

Low sodium Na - vomiting + diahorrea.

There was something else going on.

132 slightly below the Lower Reference. Strictly speaking minor degrees of hypo common finding and at this level not significant.

Talk about contact with Cousin - may have caused viral infection + etc !

Routine kid IV during the night - should have taken ann - Na would have been Lower.

Electrolytes checked once per day.

LP) not 24hrs from admission.

next am child more responsive - comfortable night - reassured staff - he asked for a neurological referral.

DrW seen her - non convulsive seizure activity -

Diagnosis - ~~not~~ non fitting status.

child with ~~epi~~ epilepsie - cluster of seizures - not unusual.

At times when such child ill unwell - seizures come back

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parents query not taking urine
not something routinely requested - requested if you think
clinically significant hyponatraemia - no one thought that
- once 121 recorded - such tests taken (but no results on file)
But appropriate tests
- no concern re urinary output
(Prof young believes that you cannot say how much urine
passed)
- given a list of anti convulsant Drugs during the day.
- she was also been treated for Meningo-spet?
- Hypo identified suddenly but fell over 24 hr period
132 - 121 in 24 hrs - Rapid decline.
Anti
= diuretic hormone - happens because child unwell does not
happen automatically.
- inappropriate ADH production - leads to Na falling
- Combination of all conditions that caused odaema.
- would she have ~~suffered~~ survived?
SIADH alone ch may do better
SIADH and other features prognosis poor.

Belinda Richardson · 02890902066

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Consultant Dr Webb + Prof Young.

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25/4/2006. Clarke Roberts.

Low level metabolism + requirement for fluid restriction.
Brigham p.4. para 2.

Someone in clarke position would get a different fluid management programme now.
Brigham - treatment may have disguised other relevant symptoms.
P. Young if Low Na recognised earlier - Reduced Risk of * ** cerebraemia but may not have prevented it or death!

why not transferred to ICU at 9pm?
more concentrated Na solution could have been given But this was not a standard approach at that time especially in children.

may have under-estimated how ill she was?
parents may believe that they were misled.

F/A.

Date: Ref: File Name: Location:

Claire Roberts.

Mr Brigham.

not his particular area of expertise. Cannot totally ignore previous neurological function - fluctuations which could be explained by any of the diagnosis inc hyponatraemia

Bld test. 8 - 12 midnight. result 132 ↓ admission result. 132 ↓ (means 132 Low)

Would you seek a bld sample next ann?

Diff area. Children have few blds taken - uncomfortable/ unpleasant and not that useful. Recommendation every 24 hrs when on IV

< 1/3 patients on IV get blds taken every 24 hrs.

probably every 24 hs

would not do a bld sample next ann. - would Restruct fluid + restrict sample every 24 hs.

Urine sample - easy to send off - might have been helpful. But can be difficult to collect.

Michael Lavery SR.

21 pm - end of hypo but not clinically significantly

5 - 10% of such children have hypo.

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Heart rate normal - sign of how full circulation is.
Lose fluid circ shrinks - heart speeds up.
Heart rate no bearing on hypo just how full circ.
Some contact with child with gastro - likely to cause infection.

Then!!

- urine output with hypo - suggestive if no anti diuretic hormone.
  then fluid management correct.
  probably had a reduced need for fluid.
  child pass 2ml per h per kilo.
  no probs with differential diagnosis.
- prescription of fluids and administration - appropriate
- aggressive treatment - taken to ICU and given medication.
- Na lose to 129. is that suggestive of?
  1) result of treatment
  2) one sample inaccurate.
- Where there multiple causes for oedema?
  outside expertise - pre existing one - worse effects of hypo.

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Hughes SHO.

Date:	Ref:	File Name:	Location:
25/1/2006.		Clare Roberts	KGH/1/134.

Dr Brangam.

8pm 22/10 clear that this is a definite deterioration.
~~Extot~~ Expectant management Bx appropriate as
no progressive deterioration.

Comm. Should hypo be in a 1(b)
report "associated feature."

Initial 132 an associated feature. probs ↑ ADH could not excrete
H2O - fluid in xs of her particular H2O requirement - serum Na fell
Combination
Complexe interaction.
Cannot exclude 121 inaccurate
Take 121 out of note then enc primary probs.
124 from same arm - inaccurate
121 other arm accurate

10am. Dr Webb Friday am.
10am. Drs Th. 4/5.
Fri. 5/5.

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Clarke Roberts.

Dr Bingham.

If 121 incorrect then next recording is 129 and fall from 132 - 129 would not account for C's neurological deterioration.

121 probably correctly analysed but not uncommon to take bld from cannula (which parties saline solution.)

High levels of Anti diuretic hormone - prevent C passing free fluid :. given fluid - fluid retention. - accumulating free water explaining a fall in free Water level.

What type of aggressive treatment @ 9pm -

possible but not certain that treatment at 3am pursued at 9pm may have made a difference.

Up to that point nothing alert medical team.

Had a bld test been taken and had it shown low Na level.

Is she being given 175 ml/hr when she should have been given 64 ml/hr. (prescribed)

He says enormous vol. of H_2O being administered - :

if that was the quantity + if hypo fluid then large.

fluid given after 8pm would have increased Na.

She is receiving more fluid 7o mls - Rather than 60.

Vol not as important as composition of water.

The cause for GCS falling at 9pm - would have happened earlier.

The Serum Na falling - an accumulative effect over a long period

Still contraversality ve treatment of hyponatraemia.

(Controversy.) hypertonic Saline.

electrolyte free water restriction.

22/10/96 ignores drowsiness - clinical picture is of a pt whose health is deteriorating despite intervention.

and Some fluctuations. (see Dr W's Summary)

20 00 obeying commands.

1300 " "

a fluctuating conscious level without an absolute trend.

no clear trend of deterioration until after 8pm.

page 5. Dr W's Statement.

2pm 8pm.

Clarke tonighter am but V throughout Day.

2pm 6-7. GCS.

on edge of coma that afternoon.

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Date: Ref: File Name: Location:

25/4/2006. Clarke Roberts. Rgh/1/134/05.

Mr McGrea for Family
BZ.

MR Lockey.

Date of Death 23-10-1996.

Inquest being held - Adam Strain Lucy Crawford + Rachael Ferguson -
fluid management played a part in why each child died -
Subject of much discussion + Comment. - O'Hara Inquiry -
to Take a wide view - Can anything be done to prevent a
Similar death.

Roberts have asked to formally refer the matter to Inquiry +
as RGH asked Coroner to look at case - provided O'Hara Inq
Coroner's of all reports obtained. Does it think that O'Hara
would resist getting consent/auth. of Minister.

Was hypo - primary/al part or of an ancillary nature?
aim of any Inquest - ascertain accurate formulation of
Cause of Death? Death Cert being written - How would death
of clause be formulated? What a/a be and what
relegated to part 2. (Significant Conditions but not
Causative of death) Formulation of causal chain!
If there are wider issues - Leave them for O'Hara Inquiry.

Is there sufficient evid that C had hypo?
where is 'causal chain'?

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Mr Alan Roberts. Statement Read. Clerk Margaret.