

DATE	CLINICAL HISTORY, EXAMINATION AND PROGRESS
	No seizure activity observed. * fundamental error *
	Attended by Gaston (UHD) By SHO / DR SANDS.
	6mths old seizures and I, to this - NHD.
	NOTE - [Wait 132] * f3c - [WCC 116.4] * gene 66.
	of Apnoeic. On 10 fluids. WAS 16.5 A
	Full colour. Little response compared to normal.
	CNS. Answer sluggish. to light. CNS
	Difficult to see fundi. Most difficult.
	Slit. long dark signs. Full eye
	Imp. Non fitting status. / ~~exacerbated / exacerbated~~ *
	Plan. Rectal DIAZEPAM was this entry made at a different time?
	Dr West When?
	Dr de Gaston re PNHx Why?
	(see handwriting dated 11.11.96 3.35pm Dr Sands)
23.10.96	Neurology - Park 40m
4pm	9yr old girl with known learning difficulties - Parents not available. - Grandmother Hb - vomiting + distress yesterday PM - followed by prolonged period of poor responsiveness - DN No AED. - Note appeared to improve following rectal diazepam 5mg at 12.30pm
	1/5 Afebrile. No meningism. Full
	Responsive - eye opening to voice. Not reacted, withdrawal
	from painful stimuli. Reduced movements Rt side?
	Antigravity all 4 limbs.
	Mildly increased tone both arms
	Reflexes symmetrically brisk.

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CH 328770
MISS CLAIRE ROBERTS
[REDACTED]

10/01/87
Female
BT6 9PA
EHSSE
CONSULTANT

DATE	CLINICAL HISTORY, EX
22.10.96	- Clonus - sustained both sides No OP
2pm	- Rises up - eyes open - looks severely ill. Not obeying commands. - Pupil - 5mm Optic discs pale. No pupilloconstriction. Facial pallor + longed insensate upper limbs (H).
	Imp - I don't have a clear picture of problem + yesterday's episodes. Her findings today are probably long standing but the need to be checked with Nolan. The picture is of acute encephalopathy. Most probably restricted in nature. I note (v) biochemistry profile is Dr Sands 132 Na. ~ 11:00 am
	Advised i) starting of Phenytoin 18mg/kg stat followed by 25mg/kg 12 hourly with level check 6 hrs after loading dose ii) Hx of Numbness iii) CT removed of the lower limb p
22/10/96	
9.30 pm	24 kg Phenytoin 18mg/kg - loading dose = 18×24 = 632mg
	24 kg Phenytoin 2.5mg/kg 12hrly = 60mg 12hrly either IV or orally
	Check levels at 9pm.
	Nolan

DA

CLINICAL HISTORY, EXAMINATION AND PROGRESS

7/10/98 Ne 121

13-30 k 3.3

Phenylin 23.4 mg/L (10-20)

Urea 2.9

Crack 33.

Hypotensive - ? Fluid overload & low Na Fluids.

? SIADH.

Imp - ? Need for 4 Na Containing Fluids.

- Olow Reg - 1/2 Fluids to 213 of present value - 4mls/hr.

- Send urine for osmolality.

Michael Smith

(Sib).

~ 3AM

called to see

had been stable when suddenly she had a respiratory arrest and developed fixed dilated pupils

When I saw her she was Cheyne-Stokes and requiring O₂ via face mask

Saturation with bagging in high 90's

Good volume pulse

I attempted to intubate - not successful

Anaesthetic colleague came and intubated her orally with 6.5 tube

Transferred to PICU.

DATE

CLINICAL HISTORY, EXAMINATION AND PROGRESS

4 am

9.2 yr old girl c learning difficulties admitted 32 hours ago

c level of consciousness

SB Dr Webb - acute encephalopathy ? aetiology

Covered c. Acyclovir + cefotaxime

Loaded c. phenytoin + Valproate added in @ 1700 hrs

Mpm - phenytoin level = 23.4 Na^+ 121 K^+ 3.3Fluids restricted to $\frac{2}{3}$ rd maintenance

Obs otherwise stable

@ 3 am

Reg asked to see because of resp difficulties

Change: Shallow breathing

Hb = 10.2

- Intubated + transferred to ICU

PCV = 0.29

At present intubated + ventilated

* Wcc = 9.4

4-4

• has had some Midazolam but it is no longer running

Plat = 406,000

Pupils fixed + dilated

Serm
Phenytoin = 14.2

Bilateral papilloedema L > R

Na 121

No response to painful stimuli

K⁺ 3.7

BP 90/65 HR = 100/min

U = 3.6

Plan - Mannitol stat

R Sugar = 4.3

- Dopamine infusion

Creat = 45

- urgent CT scan

11.3.96

Osmol = 269

23.10.96

7.4 AM

Neurology

• S.I.A.H - hyponatraemia, hyposmolarity, cerebral edema

+ conv. seizure prolonged epileptic seizure

• Pupils fixed + dilated bilaterally normal reflexes

• No eye movements

+ for CT scan

Shiff

Clarke Roberts

56

DA

CLINICAL HISTORY, EXAMINATION AND PROGRESS

27.10.96
0530

CT Scan

P. KENNEDY (Radiology)

There is severe diffuse hemispheric swelling, with complete effacement of the basal cisterns. No focal abnormality is identified.

Henry

23.10.96

6 AM

Brain Stem Death Certificate Evaluation 1

Apnoe 8.9 am unresponsive

Does Eye Movements

Corneal Reflex Absent -- No gag response

Iced Caloric 40ml to both Ears - No Response

• No Response (motor or autonomic) to deep supra-orbital pain

• Apnoea Test in progress

CT. Cerebral herniation

Under No secondary / peralysing medication

Urea fulfils criteria for Brain stem death

The evaluation should be repeated 4-6 hrs

Ellis

23/10/96 0710

MCKAIGUE.

Paed Neurologist

9 yr. old girl admitted to PICU from Allen Ward.

suffered a respiratory arrest, was initially bagged and intubation performed by Dr Clarke (SpR) on the ward.

at the time of intubation vomiting was noted in oropharynx - liquid material no solid material. Following intubation trachea was sucked out and a small amount of watery

097-012-036

CR - PSNI

DA1

CLINICAL HISTORY, EXAMINATION AND PROGRESS

material was aspirated.

oral ET tube then changed to nasal ET tube in PICU.

Initially admitted to hospital with decreased level of consciousness with the clinical picture of acute encephalopathy. Status epilepticus subsequently developed requiring phenytoin, valproate and midazolam.

serum Na also noted to be low 121 presumably on basis of SIADH.

In PICU ^{hyper}ventilated and given mouthed 0.5g/kg

pupils fixed and dilated.

BP ~ 95 systolic. peripheral dopamine infusion commenced.

arterial line @ dorsalis pedis and

@ ant. jug. triple 5/8.

then transferred for CT scan.

Transfer uneventful.

CT scan shows severe cerebral oedema.

1 set of brain stem tests performed by

Dr Webb/Dr Steen. serum Na also checked

at same time. (133 — blood gas analyser PICU

no resp. effort with ABC's.

pH 7.13 pO₂ 124.5 pCO₂ 79.2.

Plan: maintain circulatory support as Claire is a potential organ donor.

— dopamine infusion to maintain SBP ~ 100 mmHg.

CR - PSNI

— close check on serum Na and serum osmolality and urine output.

DATE

CLINICAL HISTORY, EXAMINATION AND PROGRESS

if serum Na > 150 and osmolality > 300 then commence desmopressin
- will need conc K infusion.
- maintenance fluids with Dextrose 4% / Saline 0.18
- ventilate to pO_2 35.

Dr Wells / Dr Stan have discussed Claire's clinical condition with her parents. They initial appear to be giving consent for organ donation but Dr Wells will speak again to both parents at ~ 10⁰⁰

check CXR shows central line and ET tube in good position. There is some swelling of both hilar regions more so on the R side. There has been a deterioration in ABG's. pO_2 76 on FiO_2 0.6. I would be concerned that this picture could be explained by pulmonary aspiration or early neurogenic pulmonary oedema. Any potential transplant centre should be alerted to possibility of pulmonary aspiration.

Lab. Sample at time of brain scan tests
0600 : Na 129 K 3.6 Cl 94 urea 3.7.
18.25 glucose 7.2 osmolality 274.

0800 check 2 hourly U+Es
change maintenance fluids to 0.9% saline

JM Higgins

DATE CLINICAL HISTORY, EXAMINATION AND PROGRESS

23/10/96 Hypertensive BP 70/3 c.D.I. given HPPF 500
 Needs DDAVP. to limit polycy
 Appears B.S. Dead informally.
 But only 7 hrs, post arrest.
 Na⁺ 129 (from 121.)
 Plan - Maintain BP > 100
 - DDAVP.

R.G.

18.25. - Diagnosis of Brain death protocol completed.
 No spontaneous resps - Cor. 70mmHg.
 Discussed w parents - agree that ventilation should be withdrawn
 Consent for limited p.m. given.

HSSlein.

23/10/95 ventilation discontinued at 1845.
 1845.

MYAAGH.

Andrews

Death certificate issued - cerebral oedema 2° to status epilepticus.

24/10/95

Gp informed.

12 PM

M. HARMAN.

11.11.96

3.35 pm

- Spoke @ length with Mr & Mrs Roberts earlier today. They are naturally still trying to come to terms with what happened to Oliver. I talked through the events before his death and also talked generally with them. They are naturally anxious to discuss the PM results with someone. I will pass this on to Dr. Keen ASAP.

David
 5.2.97

ROYAL BELFAST HOSPITAL FOR SICK CHILDREN

62

NURSING ADMISSION SHEET

Consultant:

Dr. McMillan

220 Knock Rd BT5

Birth

Telephone No.

Unit No

SOCIAL DATA

SLEEP

sleeps for most of night

HYGIENE

Requires assistance for hygiene

EATING AND DRINKING/BABY FEEDING

Ostreemik 70g x 6

Milupa Spoon Feeds

MILESTONES/MOBILITY

Behind in development

SPECIFIC PROBLEMS AND AIMS OF CARE

BM No.	Patient's Problems	Aim of Care	Nursing Action to be Taken	Nursing Signature for Care	Prescriber Date	Discontinuer Date
	Conclusions -	To be vigilant re. any further complications in treatment appropriate M/cases.	Be observed re. any further signs - take careful note of acute - administer drug as prescribed by Del + note any effects or side effects.	4/9/87		
	Patient is unable to maintain nutritional and fluid balance in diet.	To provide a balanced diet record observe pr's to check in order to maintain a suitable fluid balance	1. Record accurately pt's fluid balance chart - and encourage fluids where necessary - encourage suitable spoon feeds when required.	4/9/87		
	3. Patient unable to maintain own hygiene.	To maintain good hygiene	Daily Bath Nappy Change PRN	4/9/87		

**ROYAL BELFAST HOSPITAL
FOR SICK CHILDREN**

NURSING NOTES

Consultant

Date		Signature
4 th September 1987	Patient of Dr Hicks transferred from Water Hospital for investigation of convulsions. On admission patient appeared very irritable however. There were no seizures noted either in afternoon or early evening. Patient keen for spoon feeds and bottle feeds - NB - PS does not take a 10pm feed - was seen by Registrar this afternoon.	J. M. Ester C. Graham
5/9/87	8 AM. No fits observed overnight. Slept all night. Intravenous cannula removed from scalp this morning. Feeding well, no fits observed. Mother visited 2 seizures this afternoon. Agitated this evening until 6.45 pm. Mother visited and child settled and fed well for her. No fits noted this pm.	J. Beattie J. Beattie J. Gibson
6/9/87	Fed and slept well. Good for ; no seizures this am. 8pm parents visited ; no seizures observed.	PS D. Osborne J. Beattie
7/9/87	Feeding well. No seizures observed. Snuggly this am. am Mother visited , Fasting from 9.10am for blood test. Attempt EEG - unsuccessful. Feeding well, settled from 11pm.	P. Smyth J. Beattie J. Beattie
8/9/87	No seizures observed. Feeding well he likes	M. Bismarck

097-012-042

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Date		Signature
	In very good form. Awoke all evening. Parents present.	
	Fasting from 12:00 ~~for~~ slept well.	L. Lavery.
9/87.	Went for CAT scan this am. Returned @ 11:45 am. Fed fairly well.	J. Gibson
	pm In good form. Eating well. Parents visited.	C. Sutton
10/9/87.	Slept very well. Very settled morning. Keen for feeds. Mum visited.	M. Burrows
	pm Very irritable. Eating and drinking well. Rash noted behind ears? chickenpox. Seen by Dr. Parents present.	P. Hilly
11.9.87	No further rash.	B. McCover
	a. Short seizure 10am - drowsy afterwards. On good form since. Keen for feeds. Rash remains. B.N.O x 2 days. Fluids pushed. This afternoon seizure at 6:30pm - both arms and legs jerking and eyes rolling. Increased saliva from mouth. Seizure lasted 5 minutes. Irritable and drowsy after seizure. Anticonvulsants changed.	L. Curran
	No seizures observed. Slept well.	L. Lavery
12.9.87.	Good form, no seizures this am. Feeding well. L.P.V.	A. Mills
	For sleep study Monday.	
13/9/87	No seizures observed. 1 seizure recorded at 8:45 pm, irritable and unsettled this am.	A. Loh
	No seizures observed.	L. Lavery
14/9/87.	For EEG this pm. Remained awake for most of morning. Feeding well. No seizures observed.	A. M. Loh

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U.S. 140.

Date _____

Signature

Shadden

P. H. Long

Shadde

P.H. King

C. Graham

Shadde

Ans

AL-2

[Handwritten signature]

A. Donnelly

by seizure this evening Discharge!

ROYAL BELFAST HOSPITAL FOR SICK CHILDREN

69.

RECORDS OF ATTACKS OBSERVED

NAME OF PATIENT: Claire Roberts

AGE 8/12

NO. 328770

Date	Time	Exact description of attack	Duration	State afterwards	Initial
1/1/7.	4.50pm	Eyes staring for approx 10 seconds Trembling of arms and legs for several minutes	6 minutes	irritable H.	A. M. Roberts

ROYAL BELFAST HOSPITAL FOR SICK CHILDREN

RECORDS OF ATTACKS OBSERVED

NAME OF PATIENT: Clare Roberts

AGE 8 1/2

NO. 325770

Date	Time	Exact description of attack	Duration	State afterwards	Initial
1-11-87	12.40pm	Eyes staring legs + arms straight out. Moving in Suckman type Seizures	4-5 mins	drawn up + unquiet	P. McCaughey
11/87	10am	Eyes staring - no limb movements	30secs	asleep	J. McEnroe
	6.30pm	Eyes rolling, both arms and legs jerking saliva from mouth.	4-5 mins	limbless + Drassy	C. Kelly
11/87	8.45pm	Eyes rolling, sharp intake of breath, left arm jerking. jerking body movements.	2 min.		AKon/L. Vorn
11-87	11.20am	Eyes rolling. Jerking of arms and legs x 10. Saliva + following Sucking following seizure + convuls.	2-3 mins. ~~2-3 mins.~~	Irritable + Drassy.	P. McCaughey
	1.45	Staring eyes, body arching backwards in spasmodic movements. stiffening of limbs, shortening sounds and salivating at mouth.	3-4 min	Irritable H.	AKon
	8.05am	Vacant episode staring into space while in cot.	4-5 secs	settled	P. McC.
	8.20pm	Vacant episode while sitting on nurse's knee	4-5 secs	settled	
9.87	7.00am	Shaking, spasmodic jerking of limbs sharp intake of breath. Shill up at end of seizure.	4-5 min	irritable and agitated	AKon

CR - PSNI

097-012-046

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RECORDS OF ATTACKS OBSERVED

NAME OF PATIENT: Claire Roberts AGE 10-7-87 NO. 328770

Date	Time	Exact description of attack	Duration	State afterwards	Initial
10/1	1.30 pm.	Snorting, (L) hand clenched. (R) Arm out stretched. Continued to give a slight cry throughout. Colour - Pale, eyes staring. Sweating.	1 1/2 mins.	Winging. Awake. Twitching every 30 secs.	D. Osborne
	3.20 pm	Grunting. Both arms stiffening + relaxing. Hands clenched. Both legs twitching. Eyes staring. Sweating. Moaning throughout.	1 1/2 mins	Drowsy. Winging	on gloe.

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097-012-047

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N.I.H.A.

Hospital. 12-HOUR RESPIRATION PULSE AND TEMPERATURE CHART

Physician or Surgeon

DR HICKS

Ward

Allen

Surname and First Names

Claire Roberts

Sex

F

Age

7/12

Hospital No.

328770

Day

4/9/57

10

6

2

10

6

2

10

6

2

10

6

Day of
Disease

1/1

6

2

10

6

2

10

6

2

10

6

2

Day of
Disease

C° F°

41.0 105.8

40.5 104.9

40.0 104.0

39.5 103.1

39.0 102.2

38.5 101.3

38.0 100.4

37.5 99.5

37.0 98.6

36.5 97.7

36.0 96.8

105.8 41.0

104.9 40.5

104.0 40.0

103.1 39.5

102.2 39.0

101.3 38.5

100.4 38.0

99.5 37.5

98.6 37.0

97.7 36.5

96.8 36.0

TEMPERATURE

PULSE

140

130

120

110

100

90

80

70

60

140

130

120

110

100

90

80

70

60

RESPIRATION

50

45

40

35

30

25

20

15

10

50

45

40

35

30

25

20

15

10

Motions

Urine, ozs.

097-012-048

REGULAR PRESCRIPTIONS

	Date Comm.	DRUG (Block letters please)	DOSE	Time of Administration										Method and other Instructions	SIGNATURE	Discontinued	
				AM 6	AM 8.30	MD 12	PM 12.30	PM 5.30	PM 6	PM 9.30	MN 12	Other Times	Date				
G	22/10	PARALUMOL	240mg											OTPR	JUS		
H																	
I																	
J																	
K																	
L																	
M																	
N																	
O																	
P																	
Q																	
R																	
S																	
T																	
U																	

REGULAR PRESCRIPTIONS

DRUG SENSITIVITY

	Date Comm.	DRUG (Block letters please)	DOSE	Time of Administration										Method and other Instructions	SIGNATURE	Discontinued	
				AM 6	AM 8.30	MD 12	PM 12.30	PM 5.30	PM 6	PM 9.30	MN 12	Other Times	Date			Initials	
V																	
W																	
X																	
Y																	
Z																	

DIET

TAKE HOME DRUGS
INDICATE BY LETTER

Date	Details	Initials

CR - PSNI

097-012-050

Ward	Name of Patient	Age	Hospital Number	Consultant
Allen	CLARKE ROBERTS	91/12	328750	Dv Steen

DRUGS-ONCE ONLY PRESCRIPTIONS

Phenytan Pres - 18mg/kg

$$2 \times 24 = 48$$

REGULAR PRESCRIPTIONS

76

	Date Comm.	DRUG (Block letters please)	DOSE	Time of Administration								Method and other Instructions	SIGNATURE	Discontin			
				AM 6	AM 8.30	MD 12	PM 12.30	PM 5.30	PM 6	PM 9.30	MN 12			Other Times	Date	Initial	
G	21/10	PARACETAMOL	240mg											O/R	Law		
H																	
I																	
J																	
K																	
L																	
M																	
N																	
O																	
P																	
R																	
S																	
T																	
U																	

REGULAR PRESCRIPTIONS

DRUG SENSITIVITY

	Date Comm.	DRUG (Block letters please)	DOSE	Time of Administration								Method and other Instructions	SIGNATURE	Discontinued		
				AM 6	AM 8.30	MD 12	PM 12.30	PM 5.30	PM 6	PM 9.30	MN 12			Other Times	Date	Initial
V																
W																
X																
Y																
Z																

DIET

TAKE HOME DRUGS
INDICATE BY LETTER

CR - PSNI

097-012-052

Ward	Name of Patient	Age	Hospital Number	Consultant
ALLEN	CLAIRE ROBERTS	910/12	328770	Dr Steen

PAEDIATRIC INTENSIVE CARE UNIT - R.B.H.S.C.

FAMILY NAME: ROBERTS

FIRST NAME: CLARE

LIKES TO BE CALLED:

CHILD'S ADDRESS: [REDACTED]

TELEPHONE NO: [REDACTED]

AGE: 9 1/2

D.O.B: 10-01-87

BIRTHWEIGHT: [REDACTED]

NEXT OF KIN: Mrs & Mr Robert Roberts

RELATIONSHIP TO CHILD: Parents

ADDRESS: [REDACTED]

TELEPHONE NOS. [REDACTED]

WORK: [REDACTED] HOME: [REDACTED]

WITH WHOM DOES THE CHILD RESIDE:

At home

RELATIONSHIP TO CHILD:

WHO HAS PARENTAL RESPONSIBILITY FOR THIS CHILD:

Mum, Dad

TELEPHONE NO:

NAME OF SCHOOL/PLAYGROUP/NURSERY:

Yobkore Special School

(Dunoon)

DATE: 23-10-96 TIME:

REASON FOR ADMISSION:

Expiratory arrest

ACCOMPANIED BY: Mum, Dad

WHY DO THE PARENTS THINK THE CHILD HAS BEEN ADMITTED:

Due to Expiratory arrest and medical history case

MEDICAL DIAGNOSIS:

Unid

PREVIOUS RELEVANT HISTORY/ADMISSIONS:

Hereditary Hemorrhagic
Severe learning difficulties
Epilepsy (1st seizure in April 3yrs)
1st hospital admission for 8yrs
Admission in 1st year + 2nd year with
seizures

CONSULTANTS:

Dr. Sten

HOSP. NO:

PARENT(S), CARER(S) RESIDENT: [REDACTED]

Parents

WHERE:

At home

LIKES TO BE KNOWN AS:

Alan, Jennifer

DO THEY WISH TO PARTICIPATE IN THE CARE OF THE CHILD?

Yes as far as possible

SOCIAL ARRANGEMENTS:

Parents staying in Room 2

NAME AND AGE OF SIBLINGS:

[REDACTED]

ADDRESS: 24. McMillan
Conifers Hill
TELE. NO. 0
NAME OF HEALTH VISITOR:
ADDRESS:

RECENT CONTACT WITH INFECTIOUS
DISEASE:

OTHER RELEVANT INFORMATION:

None known

ALLERGIES:

None known

CURRENT MEDICATIONS AND METHOD OF
ADMINISTRATION:

DATE OR AGE
ADMINISTERED

1ST
2ND
3RD

MEASLES RUBELLA YES/NO
BOOSTER YES/NO
(FIVE YEARS)

B.C.G. YES/NO

DATE OF VISIT: 11/11/10
well dx
12/12

SIGNATURE OF NURSE TAKING HISTORY:

DATE:

WARD FACILITIES - TICK BOX WHEN EXPLAINED TO PARENTS:

PARENTS ACCOMMODATION
WITH NO SMOKING POLICY

PARENT INFORMATION

PARENT SHOWER / TOILET FACILITIES

TELEPHONE

DINING ROOM FACILITIES

SOCIAL WORKER

NUTRITION / HYDRATION

On admission -----

N/I By Mouth -----

Type of fluids instilled -----

B.M. Stix -----

Central line sites -----

Peripheral line sites -----

Arterial line site -----

Nasogastric tube instilled -----

Gastrostomy tube instilled -----

ELIMINATION -----

Urinary Catheter Size -----

Catheterised :- Yes/No -----

Urinalysis :- -----

Date of last bowel motion :- -----

Wound Drain :- Yes/No -----

P.D. Cannula :- Yes/No -----

Chest Drain :- Yes/No -----

Gastrostomy :- Yes/No -----

Ileostomy :- Yes/No -----

HYGIENE/MOBILITY/WOUND CARE

On admission -----

Skin intact -----

Sites of -----

(1) Wounds -----

(2) Skin Breaks/Pressure Sores -----

(3) Condition of Mouth -----

(4) Condition of Eyes -----

(5) Condition of Hair/Nails -----

Paralysed -----

Spontaneous Movements -----

Any Immobilising Injuries -----

/Fractures -----

Site/s -----

PSYCHOLOGICAL/SOCIAL/CULTURAL

On admission -----

Comforter -----

Religion -----

Baptised -----

CIRCUMSTANTIAL

PAEDIATRIC INTENSIVE CARE UNIT PATIENT ASSESSMENT

NAME:- Clare Roberts

DOB:-

HOSP. No.:- 326710 DATE & TIME:- 22/10/14

RESPIRATORY

Head respiratory arrest in

Allen via.

Bung beagled on admission

PAIN/SEDATION

NURSE'S SIGN:- SEA

On admission

Maintaining own airway

Method

Size & length of tube

O2 therapy

Method

Secretions

Specimen to lab.

On admission

Pain relief

Mode

Yes/No Sedation/analgesia/paralysis
PCA/infusion/epidural/oral or rectal
preparation/intermittent

CARDIOVASCULAR

NEUROLOGY

GCS 3

On admission

Colour/perfusion

Cardiac rate

Cardiac rhythm

Blood pressure

Drug therapy

Pacing wires instu

Pacing box

On admission

CNS status

Coma scale

ICP monitor

Conscious/unconscious/irritable/drowsy
3
Yes/No Type

Temperature:-

37

Heart Rate:-

140

Respirations:-

18

Blood Pressure:-

89/51

Weight:-

25 kg

NAME: Claire Roberts

HOSP. No. 328710

INTENSIVE CARE UNIT PUEB

DATE: 22/10/96

SUMMARY:

9 1/2 yr old girl with learning difficulties and Epilepsy admitted to A&E on 22/10/96. CT Scan showed severe occipital lobe atrophy. Had sudden respiratory arrest at 1 PHYSICAL ASSESSMENT OF CONDITION/NEEDS

(A) Respiratory

(1) 2 3 4 5

No Spontaneous Respirations

Needs ventilatory support. 62% O2.

68% IS Pressure 10/3.

Suction needed.

GOALS AND PLANNED CARE

(1) 2 3 4 5

1. Give if ventilated patient.

To maintain blood gases within normal limits.

Suction 3-4 hrs.

(B) Cardiovascular

(1) 2 3 4 5

Hypotension

Requires dopamine infusion

Tracheal tube lines.

(1) 2 3 4 5

Requires dopamine to maintain blood pressure > 100.

Reveal BP 100, HR, HR.

(C) Pain/Sedation

(1) 2 3 4 (5)

NIL.

(1) 2 3 4 (5)

Keep patient pain free.

(D) Neurology

(1) 2 3 4 5

Agitation 3.

No abnormal at all. Picked up 7 and mid.

No abnormal at all.

(E) Nutrition/Hydration	1	(2)	3	4	5
10 malnutrition U-5 withers Normal Record intake of fluid	1	(2)	3	4	5

(F) Elimination	1	(2)	3	4	5
Person's urine well. Catheterized suggest catheter U.B.	1	(2)	3	4	5

(G) Hygiene/Mobility/ Wound Care	1	(2)	3	4	5
Get ~~over~~ skin intact.	1	(2)	3	4	5

II PSYCHOLOGICAL AND SOCIAL/CULTURAL	1	2	3	4	5
Family present	1	2	3	4	5

III CIRCUMSTANTIAL	1	2	3	4	5
	1	2	3	4	5

CR - PSNI

83

MORNING:

EVENING:

2pm - 6:15pm

NIGHT:

11/11 Prisoner taken out.
Observed 6:15pm.

Prisoners released
for PM in car. Consent signed.

SIGNATURE:

OFFICERS

SIGNATURE:

SIGNATURE:

h...

Clare Roberts

23/10/96

MORNING:

(A) Ventilation changes as per
cardiac. Secretions minimal and
normal.

EVENING:

(A) Ventilation as per chart.
24.1 - 6.15 PM.

NIGHT:

(B) B/P at 6.00 20/120 HRRF
gives further blood HRRF given
Temperature remains low. Noised
no heating blanket.

(B) B/P at 2.00 15/120 HRRF
gives. Temperature 37.5 no heating
blanket.

(C) Remains pale free

(C) no change

(D) GCS 3 No response
Pupils 7 not reacting to light

(D) no change

(E) T.V. given as per chart.

(E) fluids changed to 5% SALINE

(F) Urine output commenced
no DVP infection. Urine 100.
N.B.O.

(F) Urine output decreased.

(G) All care given

(G) all care given

SIGNATURE:
SR1 FORMS

SIGNATURE: P. Walker

SIGNATURE:

CR - PSNI

097-012-061

MORNING:

EVENING:

NIGHT:

CR - PSNI

097-012-062

SIGNATURE:

SIGNATURE:

SIGNATURE:

144

PNP94J184 WNC76

DIAGNOSIS OF BRAIN DEATH

PATIENT'S NAME Celine Roberts AGE 7 UNIT NO: 328770DOCTOR 1 Dr. D. H. H. DOCTOR 2 Heather J. SteinDIAGNOSIS Cerebral Oxidation
(Condition leading to brainstem death)

	1st Test		2nd Test	
	Date: 23-10-96		Date: 23-10-96	
	Time 0600		Time: 18-25	
	Dr 1	Dr 2	Dr 1	Dr 2
1. DRUGS/HYPOTHERMIA				
a. Have any muscle relaxants been given during the preceeding 12 hrs?	No	No	No	No
b. Could any significant neuromuscular blockade remain?	No	No	No	No
c. Could other drugs affecting ventilation or level of consciousness been responsible for the patient's condition?	No	No	No	No
d. Is the rectal temperature below 35°C?	No	No	No	No
e. Is the blood pressure adequate and stable?	Yes	Yes	Yes	Yes
f. Could patient's condition be due to a metabolic/endocrine disorder?	No	No	No	No
2. BRAINSTEM REFLEXES				
a. Do the pupils react to light?	No	No	No	No
b. Is conjugate deviation of the eyes induced by instilling ice cold water on each eye (Caloric test)?	No	No	No	No
c. Is any eye movement present when head rotated (Doll's eye reflex)?	No	No	No	No
d. Does any response occur when each cornea in turn is touched?	No	No	No	No
e. Is there any response to painful stimuli in the area supplied by the cranial nerves?	No	No	No	No
f. Is there a gag reflex or reflex response following bronchial stimulation by a suction catheter passed down the trachea?	No	No	No	No
3. APNOEA TEST				
a. Is there any evidence of spontaneous respiration?	No	No	No	No
b. Did PaCO ₂ rise above 50 mmHG during apnoea test?	Yes	Yes	Yes	Yes
c. Was there any evidence of spontaneous respiration during apnoeic period?	No	No	No	No
	1st testing		2nd testing	

SIGNED: Doctor 1 Dr. D. H. H.Doctor 2 Heather J. SteinHeather J. SteinHas organ donation been considered? YesIs this a Coroner's case? No

097-012-064

111

GUIDELINES FOR MULTIPLE ORGAN RETRIEVAL

1. Blood should be sent to the Virology Laboratory RVH, for Hepatitis B, HIV and CMV antibody titres. If not already available the patient's blood group must be ascertained.
2. Perform first set of brain stem tests. After this speak to parents about the concept of organ donation. Give them approximate timing of second set of brain stem tests.
3. Inform UK Transplant Service (UKTS) in Bristol (0272 507777) about the potential organ donor. Information required - age, height, weight, abdominal girth, FBP, LFTs, U&E and creatinine.
4. If a kidney only donation is anticipated, page the on call Consultant Nephrologist, Belfast City Hospital (329241). Have information regarding the use of inotropes, antibiotics and other drugs, blood gas analysis, blood pressure and urinary output.
5. Perform second set of brain stem tests. Ensure brain stem death form is completed.
6. Inform parents that a diagnosis of brain stem death has been made. Request consent for organ retrieval and specify which organs. ~~consent form should be signed by a parent plus two witnesses.~~
WRITE IN CHART THAT CONSENT HAS BEEN OBTAINED
7. If relevant, phone the Coroner (332344) to report the death and request his permission for organ retrieval. Phone UKTS and/or Renal Unit, BCH to confirm that organs have been made available for retrieval.
In the case of multiple organ retrieval UKTS should be given about four hours (depending on the time of day) by which time confirmation for organ retrieval should have been received. If no assurance for retrieval has been given by this time then the Renal Unit should be informed and a kidney only retrieval organised.
8. Communicate with the Operating Theatre Sister and give details of the scope of surgery and the estimated starting time. Please keep Theatre involved of any change in plans.
9. Should retrieval be repeatedly postponed the guiding principle should be that any retrieval be completed before the morning following the diagnosis of brain stem death. This allows a post mortem or funeral arrangements to proceed without any delay attributed to organ retrieval.

B

Complete & Bring to clinic
Medical Notes

CONFIDENTIAL

THE ROYAL BELFAST HOSPITAL FOR SICK CHILDREN

Audiology Clinic

(If there is a choice of answer, please circle the correct one:—

e.g. (NO) YES SOMETIMES)

SURNAME OF CHILD:

ROBERTS

FIRST NAMES:

CLAIRE MARGARET

DATE OF BIRTH:

10-1-87

SEX:

FEMALE

TELEPHONE NO:

ADDRESS:

NAME & ADDRESS OF FAMILY DOCTOR:

N.H.S. Number:

By whom were you referred to the Audiology Clinic?

Is your child attending (or has he attended) any

Date first
went there

Play group

Nursery School

Normal School

School for the Deaf

Partially Hearing Unit

Other Special Unit

(Please give details)

IF OVER 16, STATE HOW EMPLOYED:

PARENTS

Father's Occupation:—

Mother's Occupation:—

At home all day. ✓

Goes out to work.

If so, how many hours a day?

What is your main worry about your child and in what way do you most want to help?

The **ROYAL**
HOSPITALS

THE ROYAL BELFAST HOSPITAL FOR SICK CHILDREN

CH328770

Our Ref - DW/AMCA

Date of Dictation - 28.2.97

Date of Typing - 21.3.97

Mr & Mrs Roberts,

Dear Mr & Mrs Roberts,

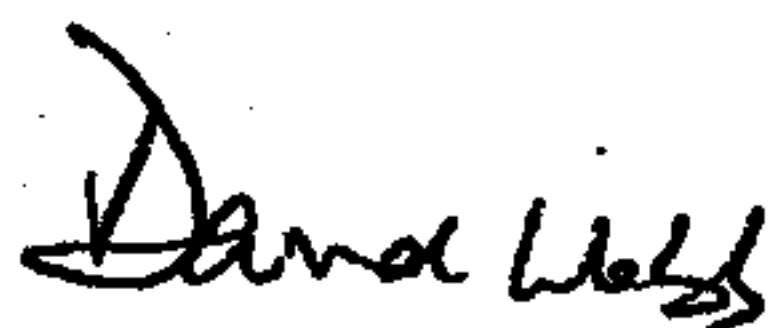
re - Claire

My sincere condolences after the loss of your daughter Claire.

In summary the findings were of swelling of the brain with evidence of a developmental brain abnormality (neuronal migration defect) and a low grade infection (meningoencephalitis). The reaction in the covering of the brain (meninges) and the brain itself (cortex) is suggestive of a viral cause. The clinical history of diarrhoea and vomiting would be in keeping with that. As this was a brain only autopsy it is not possible to comment on other abnormalities in the general organs. No other structural abnormality in the brain has been identified.

With kind regards.

Yours sincerely,



.....
DR. DAVID WEBB
CONSULTANT IN PAEDIATRIC NEUROLOGY

c.c. R.B.H.S.C.

CR - PSNI

PATRON: HRH The Duchess of Kent

The Royal Victoria Hospital
The Royal Maternity Hospital
The Royal Belfast Hospital for Sick Children

THE ROYAL GROUP OF HOSPITALS AND DENTAL HOSPITAL
HEALTH AND SOCIAL SERVICES TRUST

180 Falls Road, Belfast BT12 6BE Northern Ireland
Telephone: 01232 240503

097-012-067

Monday 21 October 1996

3:00pm Claire arrived home from school
(Note from teacher in Claire's school diary stating sickness)
6:30pm GP Dr D Savage calls to examine Claire
7:15pm Claire is admitted to A&E Belfast Royal Hospital
8:00pm Claire admitted to Allen Ward (Blood test, IV fluid given)
10:15pm Claire settled and asleep, we leave hospital

Tuesday 22 October 1996

9:30am Jennifer and I arrive at hospital
11:00am Speak to Dr Sands. Express concern at Claire's response
12:30pm Grandparents arrive, we go for lunch
1:00pm Dr Webb examines Claire with grandparents present
1:30pm Jennifer and I return to hospital
3:00pm I leave hospital to collect boys from school
4:00pm Dr Webb examines Claire with Jennifer present
5:00pm Dr Webb examines Claire with Jennifer present
(6:00pm I return to hospital with boys
9:00pm) Casual nursing care
9:30pm Jennifer calls into nurse's office to inform them that we were leaving hospital, as Claire was settled and asleep.

Wednesday 23 October 1996

3:45am We receive telephone call from Hospital asking us to return
4:15am Meet Dr Steen/Dr Webb who advise us that Claire is going for a CT scan



Alan Roberts
12 April 2006

The **ROYAL
HOSPITALS**

THE ROYAL BELFAST HOSPITAL FOR SICK CHILDREN

*Medical
notes*

Secretary ext. 2049

18th November 1996

Mr. & Mrs. Roberts


Dear Mr. & Mrs. Roberts

I wish to drop you a short note following the recent sad death of your beloved daughter Claire. It was an extremely traumatic time for your family and I am sure you still have many questions to ask. I would be delighted to meet with you both at any time in the future to discuss any queries you might have. Post-mortem results will not be available until after Christmas and even then I may not be able to answer all your questions.

Staff of Allen Ward and Intensive Care have repeatedly commented on the wonderful family support which you had at this time and I hope the closeness of your family bond will be of some comfort to you along with your faith.

I have included a leaflet from the Meningitis Research Foundation on death, I know meningitis was not Claire's problem but when I read the leaflet I thought some of the comments in it were very real and perhaps would be of help to you. Please do not hesitate to contact my secretary to arrange an appointment.

Yours sincerely

Heather J. Steen
.....

**DR. HEATHER STEEN
CONSULTANT PAEDIATRICIAN**

/mg

CR - PSNI

PATRON: HRH The Duchess of Kent

The Royal Victoria Hospital
The Royal Maternity Hospital
The Royal Belfast Hospital for Sick Children

THE ROYAL GROUP OF HOSPITALS AND DENTAL HOSPITAL
HEALTH AND SOCIAL SERVICES TRUST

180 Falls Road, Belfast BT12 6BE Northern Ireland
Telephone: 01232 240503

097-012-069

PROGRESS AFTER BIRTH

Feeding habits in early months:—

Normal

Slow

Difficult

Sleeping habits, first year:—

Normal

Drowsy

Cried a lot

Has your child:—

Been vaccinated or immunised?

NO

YES

Please give details

Twice 3 in 1 VAC

Had any infectious disease?

NO

YES

HAS NOT HAD 3RD IS NOT ALLOWED TO HAVE WHOPPING COUGH DUE TO HAVING FITS.

Had any other illnesses, accidents or injuries? YES

Been admitted to hospital?

NO

YES

Which hospital and for what reason?

ULSTER HOSPITAL & BELFAST ROYAL FOR SICK CHILDREN

If your child has been under any other Doctors for investigation, would you please give details:—

DR GLEADHILL ULSTER HOSPITAL & DR HICKS BELFAST ROYAL

Has your child been away from you for more than a few days?

YES

HAS HAD EEG, TUB C.A.T. SCAN, BLOOD ETC

GENERAL DEVELOPMENT

At what age did your child:

Sit up?

Walk?

10 MONTHS NOT VERY STEADY

When did he:—

Start to babble, saying "Dad-dad-dad-dad", "Ba-ba-ba"?

Start to say first words?

Use hand to hold a spoon to feed?

Which hand does he prefer to use?

Right

Left

Either

Are movements:—

Normal?

Is he clumsy with:—

Hands?

Unsteady?

Feet?

At what age was he dry during the day?

Have you any worries about your child's behaviour?

NO

If attending school, do you consider he is:—

Having difficulties?

Getting on well?

Ahead of others in class?

Are there any subjects in which he:—

Is outstanding?

Finds particular difficulty?

Has he had an intelligence test?

NO

YES

If so, where?

Has he had his eyes tested?

NO

YES

What was the result?

THE ROYAL BELFAST HOSPITAL FOR SICK CHILDREN

AUDIOLOGY CLINIC

Name: Claire Reverts Hospital No. 328770 Date of Birth 10.1.87

Address: Sex: Age:

Referred by: School:

Family Doctor: Religion:

Date of Attendance 4/12/87 @ 11

RBHSC 20

Date
7/12/87

Distraction

	Left	Right
Rattle	55-60 db	55 db
S	65 db	55-60 db
Chimebar	? to db	60 db
Voice	60-65 db	60-65 db

11/12

Referred GP - failed screening tests.
may have hearing loss, but responds to loud sounds.

No ear symptoms

Babble +

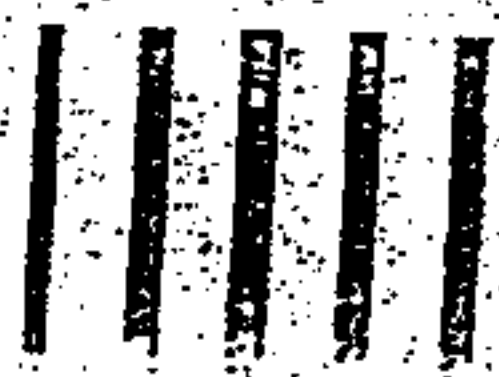
PMH: Fits
(on Epilim).

Ears: TMs dull, free.

Distraction levels 50-60 dBA.

T'grams - flat.

? Echo G. See ↑ 12



Date

8180

Mother (date) hearing fairly good
ear TMS fine

T'grams - name

- final assessment - 2

11-3-81

Mur. job & m. better. turn, hands, & voice. Panned test results to
TMS sat. 2/20/80

24688

Mother thinks hearing normal. See X 1 3/12 Bill M

T'grams ✓

D.

DATE

CLINICAL HISTORY, EXAMINATION AND PROGRESS

4/5/87

8/17

Referred from GP.

P/c convulsion.

A.T. S.D. / Maternal cousin Ep.

① Started at 6/17 ? seizure x 2

no documented pyrexia

1-2 minutes > twitching
10 minutes

Snuffles

Apixile

Pr Anaxil

No L.P.

② OPD - 3 fits following discharge 1/day

7th day
levere

Eyes Roll in

Shaking

Harsh cry

Shaking

Admitted

Last 3 mins

4/8/87

H/C 43cm

Admission - 2 episodes Abence no twitching

③ 2 1/2 doses. 16 generalized convulsions in one day
Readmitted

cy 0.55g x 1 minute

3 another day

1/3 days

Avor tegretol 24/2/87

④ 2/9/87. 4 fits one day admitted
Tonic clonic fits also

CR - PSNI

097-012-073

DA.

CLINICAL HISTORY, EXAMINATION AND PROGRESS

Tests.

ultrasound - normal 5/8/87

Ca/Cr (Ca/Alb) 2BC - HB 11.3 WBC 11.8 - 53.1

urine AM 7/8 + 28/8.

Normal

urinary sugar

EEG

7/8

my

CSF

24/8/87

Intell. clear
adjusted - blood.

WBC 30.

RBC 72,000

plasma 1.6 g/L

ly 4.1

Karsthorpe very slight
No Retention

Rx

Triptan

1.75ml

B.D.

35mg

B.D.

- about 10kg

level

6.2

Voces

Triple x 2

Exam.

well ingested

14/10 43cm

20th/10 48cm

Intake

Food (N)

(C) eye melle (R)

PEEL

Change normal

Pat (A) eye movement - no abnormal

DATE

CLINICAL HISTORY, EXAMINATION AND PROGRESS

Smells normal.

- Head control normal

- Trunk control poor - cannot sit tripod fold forward.

- no lateral reflexes.

- Roll semi prone

- Looks at hands

- Will not reach but holds objects when placed in hands no transfer. Will bring hands together & pass attempt to hold.

Uses (R) better than (L).

- Prone Lifts head & upper chest, attempts to lift on forearms, no press up

- Weight bear (support to sitting)

- Kicks both legs equally

- Reflexes seen equal & normal in limbs. Plantar equivocal.

- Tone (L) a little flaccid to (R) trunk poor tone otherwise normal.

- Turns head to sound follows laterally not upwards.

DA

CLINICAL HISTORY, EXAMINATION AND PROGRESS

Pimp

Fits x 1/2 since age 6/12

Developmental regression - 6/12 development

Spoke E. mom :-

showed Health visitor book -

Dev. record to 6/12 - at 6/12

- nothing reaching for objects + using both hands

no action of transfer.

- Not been reaching + grasping at 4/12

- sitting momentarily at 6/12 + slight hearing.

- smiled 5/12

Would feel regressed since 6/12 but probably hard until 12/12.

• Had 2 brief episodes yesterday - lasting few minutes (clenching hands, stiffening, slight jerking) began before onset of fit.

• Mom describes some but recently extends arms + can bend forward.

Also describes twitching of eyes + face.

Can cry - shortly after episode.

Mother also knows it is going to happen because she feels it from.

CR - PSNI

Could + Tenetor if acc. levels lower than before - 10/12/12

DA

CLINICAL HISTORY, EXAMINATION AND PROGRESS

7-9-87

No further seizures / twitches episodes

Alert & well after wife

? May need ABG later.

CT scan, EEG, furo, ca⁺⁺, u/e, plasma amino acids

Urine for AAs & organic acids, fasting pyruvate & lactate, FBP, tock screen

Repeat levels later.

RAM

8-9-87

Well for CT scan tomorrow. Consent.

Verbal EEG report - ? outside normal limits.

RAM

9-9-87

CT scan. Only had 1 hr. atropine for pre-med.

Methohexitone 225 mg orally. Satisfactory sedation

No problems

Tupituba (See Rep. Anaesthetics)

9-9-87

No problems - No further seizures. Afebrile

For Repeat levels & tock screen later.

furo.

Dr. Hicks to speak to mother on Friday.

RAM

10/9/87

Behaves normally. No further seizures.

Alert. Afebrile.

Good head control. Fixes eyes. Hearing.

Tone & exp in lower limbs. Sitting post.

Wg RS - Clear.

Await results of Ex. ? Home soon. As before.

RAM

11-9-87

CT scan

Urine later

44

DATE

CLINICAL HISTORY, EXAMINATION AND PROGRESS

11/9/87

EES not hypsarrhythmia
CT normal

had repetitive seizures yesterday lasting for seconds arms & legs flexed - like soldier lying at the time.

Strong episode this morning

? Taperol

WATSON

? use clonazepam

Playing with letters across car - reading & grasping
shaking rattle
using left letter than right.
Holding rattle right hand

END

change to Epilin + wear Taperol.

200mg 2.5ml 3.0 (100mg R.D)

Wear Taperol.

1.75ml

daily

x 1/52 ?

dh de

x 1/52

1 1/52

then stop

Sleep EES on Monday

high stage

WATSON

12.9.87

if EEG shows deterioration

- hypsarrhythmia

Start ACTH 40mg/day

- not quite hypsarrhythmia

repeat in 3.

CR - PSNI

if EEG not worse ie NO hypsarrhythmia

097-012-078-

DATE	CLINICAL HISTORY, EXAMINATION AND PROGRESS
------	--

At Valproate:

Enzyme full breakdown 10-14. Serum concentration

1-10-87

12/9/87 Had further 2 seizures yesterday
Salmon type.
Has erythematous rash on
scalp - snails sent
To nurse L.P.

Appearance Blood Stained

P. Burn

At Protein 1.7 g/l
WCC < 1
RBC 8,400

12/9/87

- One fit yesterday x 2 minutes.
- Hyperventilator at a day.
- On Epilim.

CR Protein ↑ 1.7

MB

14/9/87

Well
Awake sleep CES. pm
Will need Epilim levels checked next week

MB

15/9/87

- Fit today lasting 2-3 minutes
- Jerking / shaking / cross of hands
- No response 35g orally 8 1/2
- Levels Friday

CR - PSNI

097-012-079

- Fit every second day
but low after strain, attack

MB

26

DATE

CLINICAL HISTORY, EXAMINATION AND PROGRESS

17/9/87

No Seizures since 15/9/87
Much brighter this morning
Weaning off Tegretol
only 3mg once a day
For Epilin levels tomorrow

P. Bunn

18/9/87

mom feels she is Epileptic since starting Epilin.
2 day fit free until last night - didn't last as long
& mom did not feel it was a seizure
seem to be precipitated by light being switched
on & woke from sleep had been snoring
mom feels fits occur when she is waking
from sleep.

had been getting 2-3/day so some
improvement.

check Epilin levels today

- still floppy

Discharge on Epilin 100mg BD

Weaning off Tegretol.

CR - PSNI

ALLEN WARD IN-PATIENT	
REVIEW	✓
WHEN	18/9/87
WHERE	CR/PSNI
D	18/9/87

to get 3:1.

W. A. Bunn

DA

CLINICAL HISTORY, EXAMINATION AND PROGRESS

22/7/87

Mother rang up. Claire is still having seizures on alternate days.

DW Leg advised to ↑ Epilim by 10-15mg daily was taking 2.5mls Epilim B.D.

Advised to ↑ this to 2.75mls (110mg) B.D.

R/v to be arranged. (Tegretol as before).

R. Huckle

EC on head 40/40 O/E Ws clear & Hb = 11.6

47

TREATMENT FOR

D.O.B./Age

HOSPITAL No.

328770

[illegible][illegible]

097-012-082

DATE

CLINICAL HISTORY, EXAMINATION AND PROGRESS

2/10/96. 9 year old admitted via A+E
8pm.

pc Vomiting at 3pm and every hour since.
Stunned speech + Dravsy
Off from yesterday, loose motion 3 days ago? Friday

HPC Severe learning difficulties
Seizures 6 mo - 1yr - Controlled by He Valproate
Apr 4 - x1 seizure
Anti convulsant gradually weaned until
Enlii stopped.

HFS Speech - ca. speak in sentences, meaningful
Hearing @

V. Vision @

FM Scribbling - feed herself & supervise.
Cannot dress herself

Grossly Walk, 2pm; UP + Down stairs, favours left side & body
- Torbank. Special school. Durdale Rd

- Dr. Gaston. U.K.D., previously 2 Mths

Recently tried kite line - 2nd month, then became
agitated, 2nd month

DH nil

PH.

all nil

15

TE

CLINICAL HISTORY, EXAMINATION AND PROGRESS

4/e

37°

Res. I + II 80/min.

Re. clec.

Abd 80k. NDr. Kende No wall.

Pros. Pupils normal, Discs NDr. blurred.

PERLA

Ha VII - IX - X -

Pros. Sit-up + Stairs /acanth, ? Abaxic

Power not assessed

	R	L
Tone. upper limb	Agreeably	↑ tone
lower limb	↑ tone	↑ tone

	R	L
Reflexes D1	H	+
TJ	H	+
ES	H	+
K1	H	H
4J	+	+
P	↓	L
claus	+	+

Scare - not responding to parent's voice / intermittently responding to deep pr.

FAMILY HISTORY

CH 328770

Page: 36.

Do you have any other children? Please give age of each one and say whether Boy or Girl:—

[REDACTED]

Are any of them deaf? [REDACTED]

Do any of them suffer from trouble dating from birth such as cleft palate or heart abnormality? **N**

Is there any history of deafness in the family?

[REDACTED]

Were any of the other children late talkers:—

Is there any family history of late talking:—

[REDACTED]

Is the child Adopted? To be Adopted? Fostered?

Please give names of foster parents and Authority responsible:—

MOTHER'S HEALTH DURING PREGNANCY OF THIS CHILD

[REDACTED]

DETAILS OF BIRTH

[REDACTED]

DATE

CLINICAL HISTORY, EXAMINATION AND PROGRESS

AL Viral illness
2/ Encephalitis

10w. / 3c -

124E -

BCx -

Viral like. $\pm$ L² - afebrile.

11x. IV fluids

is dangerous? Seizure Activity.

Re-assess after fluids.

/ J. J. K.

12w

Slightly more responsive - No change.
Observed + reassessed after.

/ J. J. K.

Na 132. $\downarrow$

Hb 10.4

K⁺ 3.8.

PCV .31

U 4.5

WCC 16.5 $\uparrow$

Gluc. 6.6.

platelet. 422.000

Cr 36.

Cl. 96.

No fever (Sko)

22/10/96

WPC DR Senar

* NOTE ENTERED BY SHO.?

2 11.00am

Admitted? Viral illness

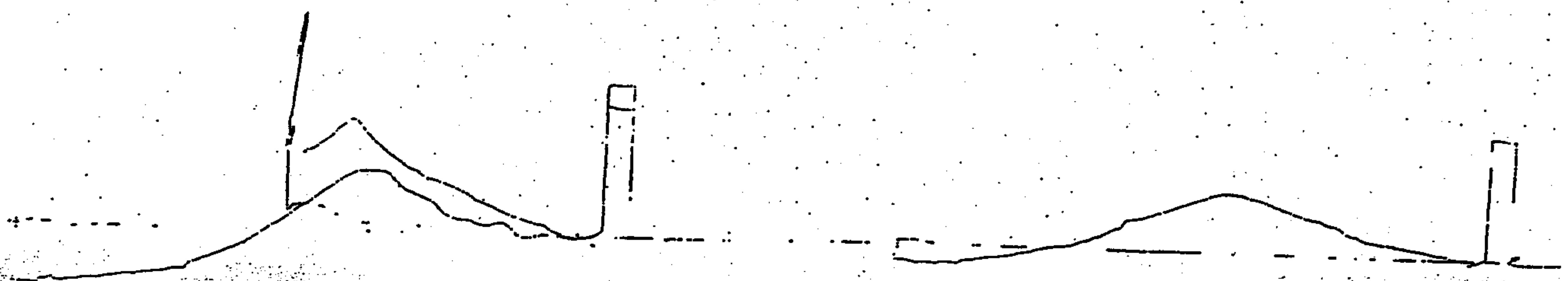
Usually very active, has not spoken to parents as per maternal
witnessing. No vomiting.

Vagueness/Vocal (apparent to parents)

CHARE ROBERTS

2-4-6-88

R. L. Rogers



CR - PSNI



ASSENS

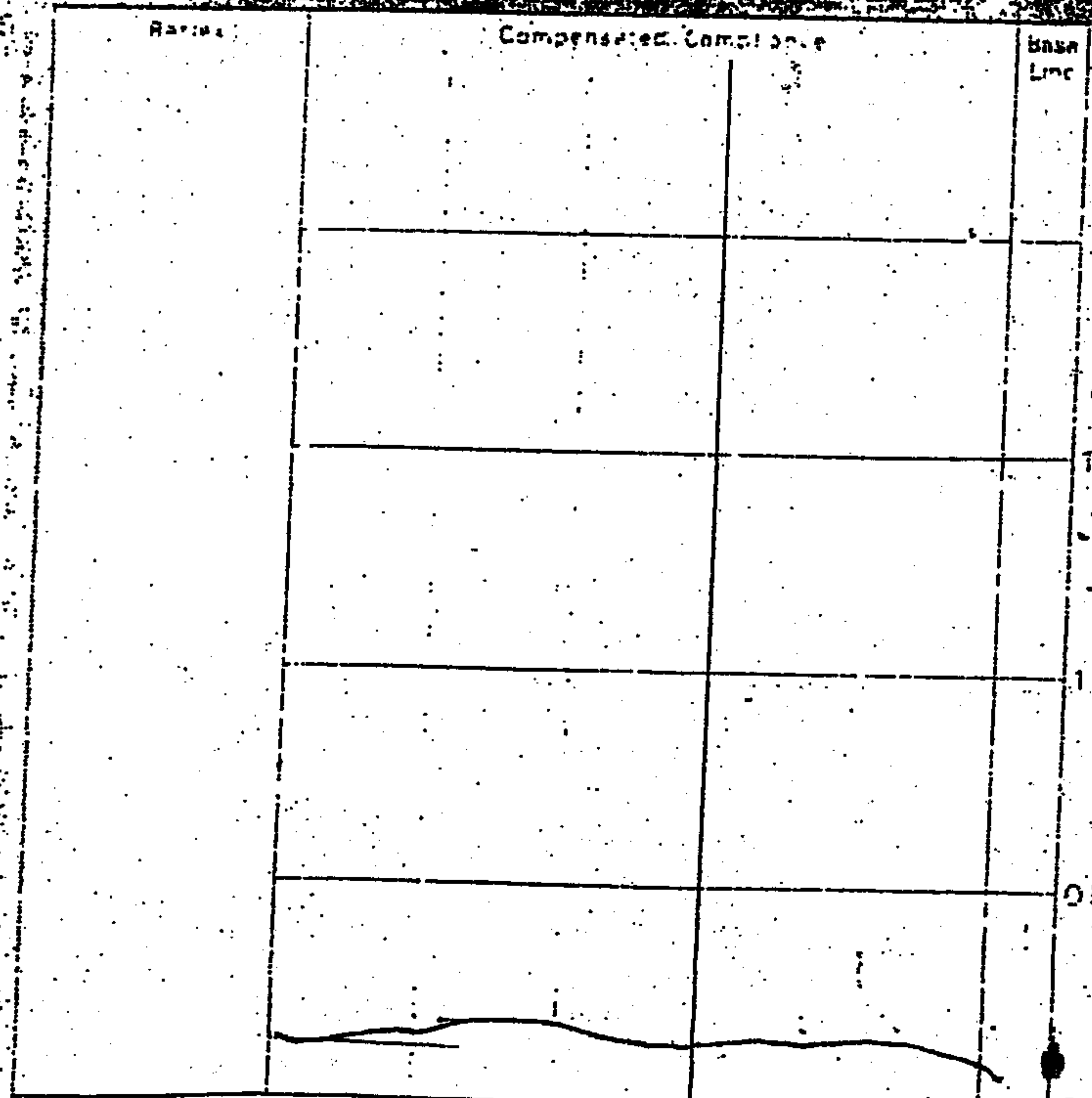
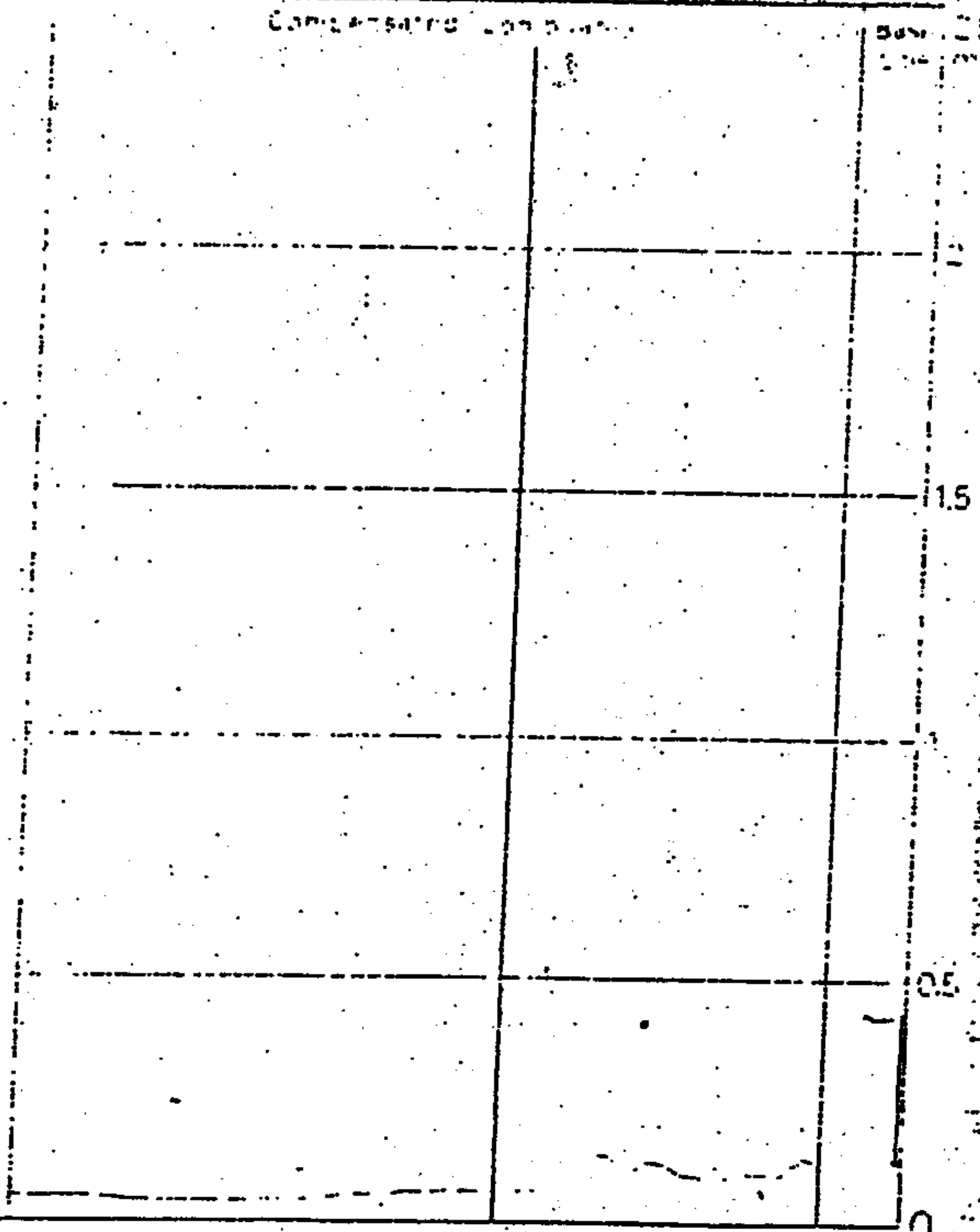
DENMARK

88 71 35 SE

Name <i>Claine Roberts</i>		Date <i>7/12/87</i>
Address		Age
Notes		Test by <i>S. Hawton</i>

Left

Right



-300 200 100 0 100 +200 Pressure da Pa

-300 200 100 0 100 +200 Pressure da Pa

CR - PSNI



Abstract

Clair Robert

2019

8:14:22

Add-on

44

142

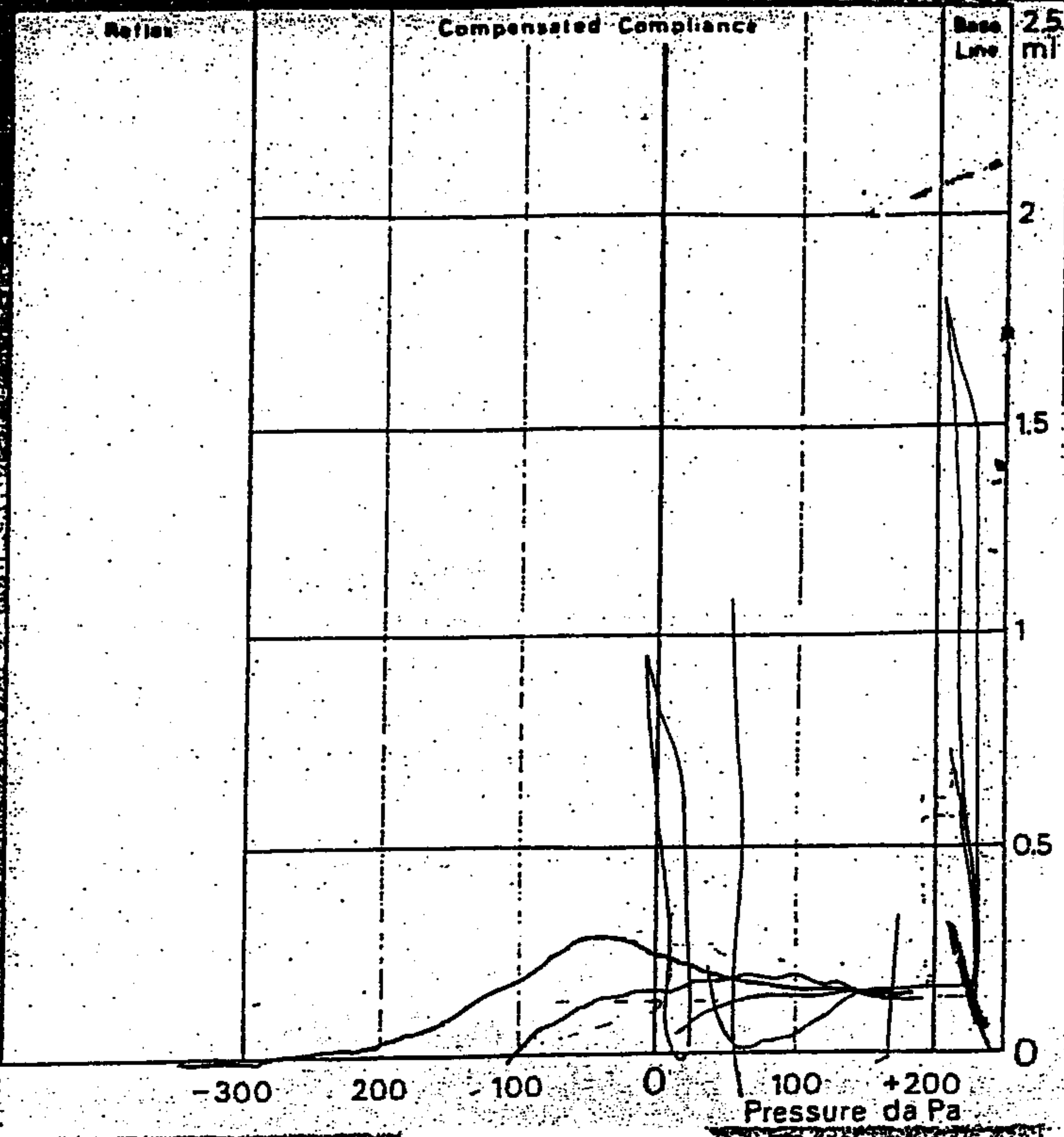
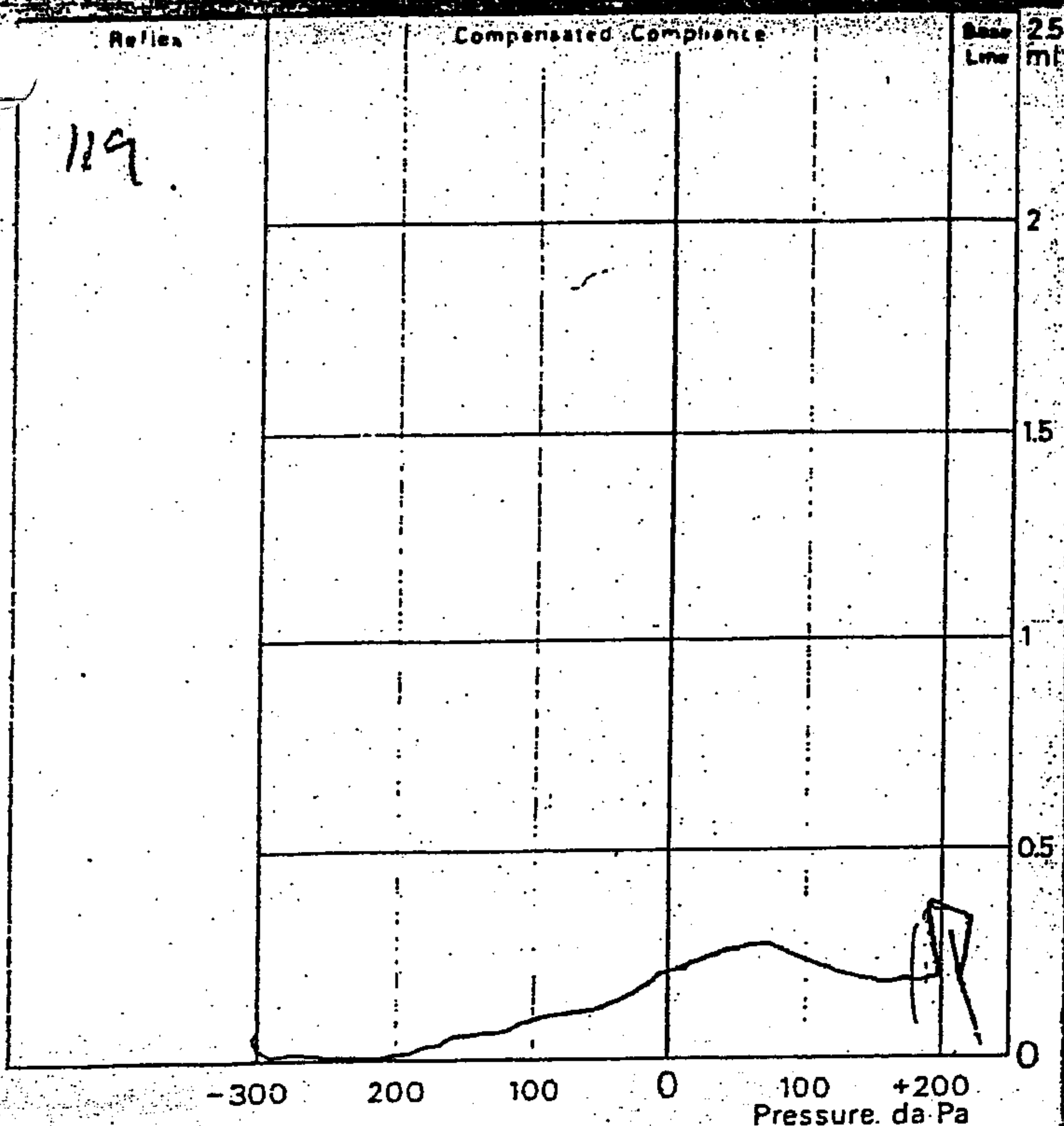
Hold

Test:

ALIN

Left

Right



E. E. G. DEPT.		AFFIX LABEL HERE OR ENTER:—	
Royal Victoria Hospital, Belfast, 12	Form No. M232 RS268	MR. MRS. MISS	FULL NAME HOSPITAL NUMBER
E.E.G. No. 6803		Claire Roberts	328770
REPORT		CONSULTANT	WARD/CLINIC
Remarks		DATE OF BIRTH	

The patient was — alert, drowsy, semi-conscious, unconscious, unco-operative.

Conclusion: The record is outside normal limits for age (8 mths). No well-defined components of sleep were seen during the patients somnolent periods, and one poorly formed episode of spike-wave, complexes was associated with a left-sided body jerk. The latter is of doubtful significance, due to associated movement, artefact and the likelihood of 'K' complexes arising during this period of sleep/drowsiness. Further EEG investigation may be useful.

WMQ 320		
Date of Recording 10.9.87	Report signed by	E. E. G. REPORT

The patient was brought to the hospital by ambulance at 10.15 AM. She was found unconscious by her mother. She had been having a seizure at home. She was brought to the hospital by ambulance at 10.15 AM. She was found unconscious by her mother. She had been having a seizure at home. She was brought to the hospital by ambulance at 10.15 AM. She was found unconscious by her mother. She had been having a seizure at home.

E. E. G. DEPT.		AFFIX LABEL HERE OR ENTER:—		
Royal Victoria Hospital, Belfast, 12	Form No. M232 RS268	MR. MRS. MISS	FULL NAME Claire Roberts	HOSPITAL NUMBER 328770
E.E.G. No. 6509.		CONSULTANT Dr Hicks		WARD/CLINIC Allen
REPORT		DATE OF BIRTH 10.1.87		
Remarks				
The patient was — alert, <u>drowsy</u> , semi-conscious, unconscious, unco-operative.				
The baby drifted between drowsiness and sleep for most of the recording. During the more alert periods a rhythmic pattern of mixed frequencies at 3-7Hz of amplitude 30-70uv was recorded fairly symmetrically. When the patient was drowsy the voltage of the dominant activity increased to 50-250uv, the pattern showed hypersynchronous qualities. Slightly deeper sleep was achieved and the background frequencies gave way to arrhythmic waves at 3-6Hz. At this stage the patient had a left-sided body jerk, this was accompanied by a high voltage burst of indefinite spikes and slow waves. Further, less well developed complexes occurred without clinical signs. No consistent focus noted.				
WMQ 320				
Date of Recording 10.9.87	Report signed by		E. E. G. REPORT	

E. E. G. DEPT.

AFFIX LABEL HERE OR ENTER:—

Royal Victoria Hospital,
Belfast, 12

Form No. M232
RS268

MR.
MRS.
MISS

FULL NAME

HOSPITAL NUMBER

Claire Roberts

328770

E.E.G. No. 6303A

CONSULTANT

WARD/CLINIC

DATE OF BIRTH

Dr. Hicks

Allen Ward

10.1.87

REPORT

Remarks

The patient was — alert, drowsy, semi-conscious, unconscious, unco-operative. *sleeping.*

At the outset of the recording the baby was drowsy and very rhythmic, high voltage activity at 4-6Hz was recorded symmetrically. When the child was sleeping lightly the dominant rhythm dropped in voltage and became less well organised. Bursts of irregular, slow components at 2-3Hz stood out from the background pattern with voltages up to 250uv and forming phase reversals in the region of the vertex; they arose spontaneously and following sound stimulus in the manner of 'K' complexes. A few irregular runs of fast components at 14-18Hz were noted in the central regions and once they occurred in a very brief generalised episode with marked attenuation of voltage. No consistent localising signs or epileptiform discharges noted.

WMQ 320

Date of Recording

Report signed by

E. E. G. REPORT

14.9.37

FALLS ROAD
BELFAST

Surname ROBERTS
Forename CLAIRE
Age/DOB 35W 10/01/87 Sex F
Hosp.No. 328770
Specimen CSF

CEREBRO-SPINAL FLUID. CULTURE. NO GROWTH IN 48 HOURS

Date of specimen 12/09/87

Page 1 of 1

CHILDREN'S HOSPITAL
Ailen ward

FALLS ROAD
BELFAST

Surname ROBERTS
Forename CLAIRE
Age/DOB 08M
Hosp.No. C328770
Specimen SWAB

Sex F

SPOTS OF RASH

CULTURE..... NO SIGNIFICANT GROWTH

Date of Specimen 12/09/87

Page 1 of 1

CHILDREN'S HOSPITAL
Allen Ward

FALLS ROAD
BELFAST

Surname ROBERTS
Forename CLAIRE
Age/DOB 35W 10/01/87 Sex F
Hosp. No. 328770
Specimen CSF

CEREBRO-SPINAL FLUID. CULTURE. NO GROWTH IN 48 HOURS

Date of Specimen 12/09/87

Page 1 of 1

CHILDREN'S HOSPITAL
Allen Ward

FALLS ROAD
BELFAST

Surname ROBERTS
Forename CLAIRE
Age/DOB 35W 10/01/87 Sex F
Hosp. No. 328770
Specimen CSF

CEREBRO-SPINAL FLUID ANALYSIS.

Appearance.....	Faintly bloodstained
Supernatant.....	
Protein (g/l).....	0.42
(Normal range, 0.15-0.45)	
Globulin.....	+
Erythrocytes (cells/ul)...	1140
Leucocytes (cells/ul)...	<1
Cytology.....	

Date of Specimen 12/09/87

Page 1 of 1

RECEIVED
OVERSEAS
12/09/87

RECEIVED
LABORATORY
12/09/87

CHILDREN'S HOSPITAL
Allen Ward
FALLS ROAD
BELFAST

Surname ROBERTS
Forename CLAIRE
Age/DOB 35W 10/01/87 Sex F
Hosp.No. 328770
Specimen CSF

CEREBRO-SPINAL FLUID ANALYSIS.

Appearance.....	Bloodstained
Supernatant.....	
Protein (g/l).....	1.7
(Normal range, 0.15-0.45)	
Globulin.....	Nil
Erythrocytes (cells/ul)...	8400
Leucocytes (cells/ul)...	<1
Cytology.....	

120

PL

Date of Specimen 12/09/87

Page 1 of 1

Ward	Name of Patient	Number							
A/J	Claire Robert	528 720							
REGULAR PRESCRIPTIONS — DRUG RECORDING SHEET									
Date	6 a.m.	8:30 a.m.	12 noon	12:30 p.m.	5:30 p.m.	6 p.m.	9:30 p.m.	12 mn.	Other Times
4/10/87					G				
5/10/87		G			G				
4/9/87		G			G				
4/10/87		G							
5/10		H			H				
5/10		H			H				
10/10		H			H				
11/10		H			H				

131

[illegible]

REGULAR PRESCRIPTIONS

DRUG SENSITIVITY

[illegible]

DIET

Date	Details	Initials

TAKE HOME DRUGS
INDICATE BY LETTER

CR - PSNI

097-012-101

Ward	Name of Patient	Age	Hospital Number	Consultant
Allen	Claire Roberts	? 8/12	328770	Dr. Hicks

ASTERN HEALTH & SOCIAL SERVICES BOARD
CYAL BELFAST HOSPITAL FOR SICK CHILDREN

DESCRIPTION SHEET

PARENTERAL DRUGS
REGULAR PRESCRIPTIONS

DRUG SENSITIVITY

[illegible]

DRUGS-ONCE ONLY PRESCRIPTIONS

[illegible]
$$\begin{array}{r} 0.2 \\ \hline 0.6 \end{array} + \frac{10}{16}$$
$$\begin{array}{r} 3 \\ 0.6 \overline{) 1.20} \\ \underline{1.8} \\ 20 \end{array}$$
[illegible]

2/2/22

132

CR - PSNI

097-012-102

ROYAL BELFAST HOSPITAL FOR SICK CHILDREN
Fluid Balance and I.V. Prescription Sheet

133

Date.....21/10/96.....
Weight.....24.1.....Kg

Name Clarie Roberts	D.O.B. 10/1/87	Hosp. No. 328770
---------------------------	-------------------	---------------------

TIME (hr)	INTAKE						OUTPUT										
	INTRAVENOUS				ORAL		Urine	Aspirate or Vomit	Stool	Comment							
	1 Level	Amount	2 Level	Amount	Fluid	Amount											
08.00																	
09.00																	
10.00																	
11.00																	
12.00																	
13.00																	
14.00																	
15.00																	
16.00																	
17.00																	
18.00																	
19.00																	
20.00																	
21.00		S/N Saline @ 6mls/hr.				P.O.T.A.											
22.00		—						Heel vomit		✓GM Randal							
23.00		24								✓GM Randal							
24.00		80 ⁵⁶						small vomit		✓GM Randal							
01.00		146 ⁶⁶						small vomit		✓GM Randal							
02.00		200 ⁵⁴								✓GM Randal							
03.00		286 ⁸⁸						small vomit		✓GM Randal							
04.00		333 ⁴⁵					PU	small vomit		✓B. Randal							
05.00		404 ⁷¹						small vomit		✓B. Randal							
06.00		460 ⁵⁶						small vomit		✓B. Randal							
07.00		536 ⁷⁶								✓GM Randal							
Total Intake		536		Oral.....ml		Total Output		Urine		Aspir ⁿ		No. of Vomits		No. of Stools			
Intravenous.....ml		536		Oral.....ml		Urine		ml		Aspir ⁿ		ml					
24 - Hour INTAKE						24 - Hour OUTPUT						097-012-103					
536						ml						ml					

135

ROYAL BELFAST HOSPITAL FOR SICK CHILDREN Fluid Balance and I.V. Prescription Sheet

Date 22/10/96

Weight 24.1 Kg

Name <u>Clare Roberts</u>	D.O.B. <u>10/1/87</u>	Hosp. No. <u>328770</u>
------------------------------	--------------------------	----------------------------

TIME (hr)	INTAKE						OUTPUT						
	INTRAVENOUS				ORAL		Urine	Aspirate or Vomit	Stool	Comment			
	1 Level	Amount	2 Level	Amount	Fluid	Amount							
08.00	No 1	68 ⁶⁸											
09.00		110 ⁴²									8fo rds		
10.00		179 ⁶⁹				cup of water.					8fo rds		
11.00		259 ⁸⁰	$\frac{80}{1.25} = 64$								8fo rds		
12.00		308 ⁴⁹	$\frac{49}{1.25} = 65$			NOT RECORDED.					8fo rds		
13.00		356 ⁴²		522		* 2.45 pm					8fo rds		
14.00		400 ⁵⁰		300		IV PHENYTOIN					8fo rds		
15.00		527 ¹²⁷		177									
16.00		562 ³⁵	$\frac{35}{1.25} = 48$								VP 100		
17.00		616 ⁵⁴		0.8							VP 100		
18.00		677 ⁶¹		2.7							VP 100		
19.00		769 ⁹²		5.5							VP 100		
20.00		806 ³⁷		6.7							VP 100		
21.00		868 ⁶²	$\frac{62}{1.25} = 92$	8.7		IV Acyclovir					VP 100		
22.00		943 ⁷⁵	$\frac{75}{1.25} = 92$	10.9		60					VP 100		
23.00	Thrs	1014 ¹¹	$\frac{11}{1.25} = 13.9$	13.9		PHENYTOIN					VP 100		
24.00		1037 ²³	$\frac{23}{1.25} = 13.3$	16.8		110V					VP 100		
01.00		1037 ⁷		19.3							VP 100		
02.00		1020 ³³	$\frac{33}{1.25} = 17$	21.5							VP 100		
03.00													
04.00													
05.00						IV Sodium							
06.00						Valproate							
07.00													
Total Intake				Total Output		Urine		Aspir ⁿ		No. of Vomits		No. of Stools	
Intravenous.....ml				Oral.....ml		ml		ml					
24 - Hour INTAKE						24 - Hour OUTPUT							
1876						ml							

ROYAL BELFAST HOSPITAL FOR SICK CHILDREN

DATE/TIME	EVALUATION	SIGNATURE	ADDITIONAL INFORMATION	SIGNATURE
9 ³⁰ pm.	11.5W at 6 months. Commence needed this afternoon	P. Miller		
	First dose of 1.5V Acyclovir erected by doctor and run over one hour.		line inserted	
	Hypnoval infusion increased by 0.1ml every 5 minutes until running at 3mls/hr as prescribed by doctor - completed at 10.40 pm.	9.30 pm 22.20.	(R) hand Bloods - U+E phenytoin level.	McCart S/N.
11 pm	1.5V phenytoin erected by doctor and run over one hour - cardiac monitor in situ throughout infusion			
	Due to U+E results NO 18 solution with 20 mmols KCL erected as ordered by Registrar. No have fluid restriction of 4mls/hr.			
	Hourly CNS observations recorded (temperature elevated at 10 pm) - paracetamol given (at 8.30 pm) by day staff		tracheal coma scale 6.	McCart S/N
23/10/96 - 2 ³⁰ am.	other observations within normal limits. Slight tremor of right hand noted lasting few seconds. Breathing became laboured and grunting - respiratory rate 20 per minute. Saturations 97% - clare stopped breathing			
PATIENT'S NAME <u>Alaine Roberts</u>				

CR - PSNI

097-012-106

REG. No. 32877Q

138

PATIENT'S NAME

ROYAL DEE LEAST HOSPITAL FOR SICK CHILDREN

AGE 70/12 DOB 10/11/87 SEX F CONSULTANT Dr. Stool REGION/BAPTISM Methodist NAME KNOWN BY CLINICIAN		PREVIOUS ILLNESSES/HOSPITAL ADMISSIONS (CONTING WITH INFECTIOUS DISEASES) Measles, Mumps, Scarlatina, Pertussis, Epilepsy (No seizures for past 2 years)		PREVIOUS ILLNESSES/HOSPITAL ADMISSIONS (CONTING WITH INFECTIOUS DISEASES) Measles, Mumps, Scarlatina, Pertussis, Epilepsy (No seizures for past 2 years)	
AGE 70/12 DOB 10/11/87 SEX F CONSULTANT Dr. Stool REGION/BAPTISM Methodist NAME KNOWN BY CLINICIAN		HOSPITAL ADMISSIONS No hospital admission for epileptic seizures.		RECENT CONTACT WITH INFECTIOUS DISEASES No known	
NEXT OF KIN (Relationship) Mother (Mrs. G. Stool) NAME (Surname, Forename, Surname) ADDRESS As Above		IMMUNISATIONS RECEIVED all latest		CURRENT MEDICATION No	
WHO ACCOMPANIED PATIENT (Parents) WHO MAY CONSENT TO TREATMENT (Parents)		KNOWN ALLERGIES None known		IDENTURES (Include crowns, plates, braces, etc.) None	
SCHOOL PLAY GROUP NURSERY (School, Special School, (Don't know))		DISCHARGE DETAILS Dr. W. M. Stool (Don't know)		COMMUNITY REFERRAL Health Visitor, District Nurse, Social Worker, Others	
REASON FOR ADMISSION (Seizures, Nocturnal) PARENTS' PERCEPTION OF ADMISSION (Mild, No understanding)		EPILEPTIC YES/NO		OP/APPPOINTMENT YES/NO	
DATE AND TIME OF ADMISSION 10/11/87 14:30		MEDICATION YES/NO		OTHERS	

ROYAL BELFAST HOSPITAL FOR SICK CHILDREN

144

RECORD OF ATTACKS OBSERVED

NAME: Clair Roberts U.N. AGE: WARD: CU

DATE	TIME	EXACT DESCRIPTION OF ATTACK	DURATION	STATE AFTERWARDS	INITIALS
22/10	3 ¹⁰ ₀	Lasted frequently Strong Seizer at	5min	sleepy	MUR
	3 ²⁵				
	4 ³⁰	teeth tightened slightly	few	asleep	
	7 ¹⁵	teeth clenched + groaned	secs		
	7 ¹⁵		1min	asleep	
	9pm	Episode of screaming and drawing up of arms. pulse rate ↑ 165 bpm. pupils large but reacting to light. Dr informed.	30secs	asleep	MUR

NURSING CARE PLAN

PATIENT'S NAME.....Clare Roberts.....

HOSPITAL NO.

145

HOSE 328770

CLAIRE Roberts

Inquest 8
NotesReport of Proceedings on 3rd day of Inquest into
the death of Claire Roberts (CR)Thursday 4th May 2006Witness Professor Young: Consultant Clinical Biochemistry
at the Royal Group of Hospitals (RGH)Dr Young had been asked by the RGH's medical director,
Dr Michael McBride, to review the circumstances
around CR's death and to comment on whether
"hyponatraemia" contributed to the cause of her death.Dr Young interviewed: (1) Dr Sreen
(2) Dr Sands
(3) Dr Rooney } no other
cliniciansClinical NARRATIVE: starting at 22³⁰ on 21:10:96 @ A&E
(Dr Young's reviewed Dr Webb's notes)
ending 18⁴⁵ 23:10:96 (CR's) death.Dr Young - when invited (though he had a pre-arranged
by HMC to suggest pro-forma completed
how he would NOW re-write THE CAUSE OF DEATH
(CoD)

1a. Cerebral Oedema

1b. Secondary to Status Epilepticus
but would now addthat he had informed Dr McBride that
'Hyponatraemia' ~~can~~ did contribute to CoDSUPPLEMENTARY SECTION to his DEPOSITIONHe did not agree with Dr Bingham about a
possible error in taking the blood urea sample
via the IV cannula - "Negligible chance of that error"Dr Young agreed with HMC John Healey that
of CR's admission hyponatraemia was NOT an issue
then, even with a Sodium of 132, which is low but
commonplace. BUT that < HYponatraemia DID
contribute to the cause of death

(2)

Dr Young's evidence continued

Therefore Dr Young concluded that the Cause of death certification should read:

(1) 1a - Cerebral Oedema
causes underlying 1b m-encephalitis / encephalopathy
hyponatraemia

(He was unable to determine to proportion which each contributed)

2. Status Epilepticus

"HYPONATRAEMIA" is a common 'end point' and therefore requires a fuller explanation
ie. excess ADH production.

Dr Young was reluctant to say in answer to HMC's question, whether (CR's) death should have been reported to the Coroner in 1996 because of the lack of awareness to this condition (hyponatraemia) at the time (1996).

HMC: JL

Should I refer it to the 'Hyponatraemic Inquiry'?

Dr Young: I agree that it should be left to the Inquiry. The causes of Cerebral Oedema are less straightforward. I don't think that any new lessons can be learned from the inclusion of (CR's) death in the Inquiry. But I would leave it to Mr O'Hara to decide.

I am aware of the complexity of his Inquiry.

HMC: JL

John O'Hara has ^{ALREADY} been approached by me about this case. I have decided to send him a copy of my findings following completion of this Inquiry.

3

Dr Young

Mr Michael McCrea, Counsel for the Robert's family.

In examination of his evidence it did not appear that Dr Young gave only an ORAC report to Dr. M. McBride - and that he had not spoken to Dr Webb, but he had read his clinical records.

(Dec 2004) In Dr W. McBride's letter to the Robert's family he appeared to admit and accept "... that there was a fluid management problem in this case." Dr Young asserted that he had not seen this letter and denied contributing to Dr McBride's form of expression. Dr Young countered that he did not believe that Dr McBride himself had read all the documents, extensively.

Dr Young was insistent that the fluid management was in keeping with the recommendations at that time 1996, and he felt that there were not sufficient signs, symptoms or tests to 'ring the alarm bells' (for hyponatraemia). However, he agreed that (CR) had the potential for "Electrolyte imbalance".

When asked, Dr Young denied having any detailed knowledge or involvement in the death of ADAM STRAIN - but had reviewed the Inquiry's Website.

Mr McCrea

After Adam Strain's death, what recommendations were made?

HMC JL (interjected) No recommendations were made until 2002.

Mr McCrea Are you aware of ANY CIRCULAR or MEMO within the R. B. H. S. C., or a policy guidance of the treatment of hyponatraemia; or the dangers of hypotonic & intravenous solutions in paediatrics?

Dr Young: As my practice is predominantly involves ADULTS I might not be made aware of such.

(4)

Mr. McCrea About Investigations into the death of Adam Strain?

HMC JL These are general issues for the Inquiry to address. They are larger than the death of (CR).

Mr. McCrea According to Dr Webb, had a blood sample been taken on the morning (22:10:96) it might have shown a low sodium.

Dr Yang: It's not possible to say. The fall from B2 to B1 might have been gradual in time.

In relation to the fluid management, Dr Yang accepted that on "NET" (CR) did have some degree of "fluid overload" saying "I agree that between 8pm and 12 midnight the volume was 'Somewhat great'."

Dr Yang continued that when the clinical deterioration was first noticed at 9pm (22:10:96) the Cerebral Oedema^(C.O.) was probably well established by then. ... The C.O. had probably been there several hours by that stage ... but did not produce changes (clinical) until 9pm ... The loss of fluids was not accurately recorded. He agreed that an earlier U+E blood test could have made the low sodium apparent sooner. But a "urine test" would not have been useful/indicate.

Mr. McCrea: Would a simple C.T. Scan have been useful earlier?

Dr Yang: A C.T. Scan is not a "simple test" - but yes it could have shown Cerebral Oedema. But you must remember that in 1996 we did not have a C.T. Scanner in RBTSC. But even so, Cerebral Oedema on Scan would not necessarily have implied a low sodium (hyponatraemic state).

(5) WITNESS

W Dr. Young

Mr. Lavery (on behalf of RBHSC & Royal Hospitals Trust)

Briefly Dr Young, your 'cause of death' formulation is similar to Dr. Bingham's & Dr. McConaghy's but you have said that "hyponatraemia" is not helpful of itself. Would you consider it an "undesirable term" as laid down in the "Guidance to Doctors completing MCCD" like 'anaemia, septicemia, uraemia...'

Dr Young : No. Not quite the same.

After "hyponatraemia" you would need to give more additional information in the 'Cause of Death'

Mr Lavery. So the Death Certificate should include the explanation "hyponatraemia ... Secondary to excess ADH production"

HMC (JC) Would you refer this case to 'HRO'?

Dr. Young I would leave that referral to the HRO itself?

I have some familiarity with the Lucy Crawford and Raphael Ferguson case - but this case is ~~more~~ LESS STRAIGHT FORWARD. I understood that one of the

~~main~~ functions of the Inquiry was look at "fluid management" in those cases. This case (CR) may broaden the terms of reference of the Inquiry

HMC (JU) ~~It is~~ the Minister of Health (N.I.) who specified the terms. Clare Roberts name is not in these terms. This would have to go back to the Minister of Health < for clarification >, as explained to me by J O'Hara.

Mr. Lavery This would mean widening the terms of the Inquiry on top of the three cases already, relating to intravenous fluids. Therefore the Inquiry would have to deal with another

Dr Young : My view is there were THREE contributory causes

- (1) Meningo-encephalitis
- (2) Status Epilepticus
- (3) Hyponatraemia ... and therefore SHOULD be CONSIDERED by the INQUIRY

⑥ New Witness (Second of the day 04:05:06 @ 11⁴⁰am)

Dr. Andrew SANDS (S)

Consultant Virologist

In 1996 Paediatric Registrar on ALLEN Ward (RBHSC)

Narrative: (S) saw (CE) on admission to Ward (22.10.96)

He requested Consultant Neurologist opinion for Dr Webb because he was unsure what was happening to (CE)'s clinical condition and needed expert advice. His first diagnosis was of
(1) non-convulsing Status Epilepticus (2) possible encephalitis /encephalopathy

In their letter to him (29.09.05) The Roberts family asked whether a C.T. Scan had been considered in view of her level of consciousness. (S) agreed that a CT Scan had been considered by H.M. But that he could not order a CT Scan without it being SANCTIONED by a Consultant Neurologist.

HMC JL : I understand that a C.T. Scan if taken at that time might have shown a Cerebral Oedema but would the reason for the C.O. have been apparent?

(S) No. . . Meningo-encephalitis and Status Epilepticus would have been considered as the causes of C.O.

HMC JL Do you agree with Professor Young's formulation of the 'cause of death'?

(S) 1a C.O 1b. M-E : S-E : "excessive ADH with hyponatraemia"

It is not easy to RANK the ORDER

HMC JL Do you consider the fluids given between 8pm - 2am to have been "fluid overload" - or is this outside your area of expertise

(S) I would defer to the expertise of Dr Bingham & Dr McCordie
??? But this was not the important issue on what happened thereafter in the patient's case

⑦

Witness
Dr Sands

Questioned by

Mr. McGee (for the family of Claire Roberts)

... You were working as a Paediatric Registrar covering
the Allen Ward.

... In 1996 did you hear about the death of Adam Shier

??? (S) No

[M.C.] Was there any criticism of '5N Saline (hypotonic)
unhindered infusion within the RBHSC.

! (S) No

[M.C.] In Oct 1996, did you hear anything about
'hypotonic deaths in children' and the fluid
management in that context.

!!! (S) I have no recollection of that linkage

(S) An urgent sample (ure) was not requested (urgently)
but it is likely that it was requested for
some-time that day.

HMC-JL - But you can't remember

Dr SANDS agreed with [M.C.] that he was
very concerned about this patient and that he
considered her (Claire) to be "very unwell".

(*) At 11 AM Dr Sands admitted that he had
considered a C.T. Scan at that time but that
it would have required a lot of ORGANISATION...
In 1996 it would have taken a lot to organise a
C.T. Scan in the RBHSC.

[M.C.] That fact that you considered a C.T. Scan at that
stage is an indication of how serious you considered
Claire's condition to be

(S) I felt that @ C.T. Scan was warranted.
I spoke to Dr Webb ... Dr Steen was unavailable
up to that time, (after I went off work) Dr Steen
had not examined her. <<But she had been informed
of Claire's admission>>

⑧

Witness
Dr Sands

Questions by

[M^cCrea] After Dr Webb became involved, you deferred to his opinion. (S) yes.

③ ... Dr Webb had fully assessed her (Claire)
[M^cC] but by 5¹⁵ pm you were unsure if Dr Webb had taken over the responsibility for Management of Claire.

③ There is seldom any thing written down when a case is transferred from one consultant to another.

[M^cC] I have three more questions for you Dr Sand that I have been instructed to ask by Claire's parents.

Q (1) Why were Claire's parents not told of how serious ill she was?

HMC JL That is for "Complaints Procedure" !!!

[M^cC] When you were counselling the parents on 22/10/88 in relation to Claire's illness - who was the senior doctor in attendance?

③ Dr Webb - was guiding the ward team and was in attendance.

[M^cC] If the ^{CT} SCAN had been carried out then could it have been a case of "Cerebral oedema but no reason for it!" That is, unclear of the cause of the C.O.? But surely there MUST BE A CAUSE for the C.O. !!!

③ I can't INTERPRET C.T Scans.

HMC JL Dr Sands, are you saying that if you had seen Cerebral Oedema on CT Scan that it would not have been directly obvious that it was due to low sodium? (S) yes

[M^cC] But it would have been one possible explanation?

③ yes

(9)

THIRD WITNESS

04:05:06

Dr. STEEN

qualified Q.U.R. 1978.

Consultant Paediatric Physician. at R.B.H.S.C.

Dr Steen began by reading her DEPOSITION.

NARRATIVE of the clinical intervention of others.

On Tuesday afternoons routinely

Dr Steen carried on OUT-PATIENT Clinics and would not normally have visited the ward

∴ Dr STEEN DID NOT EXAMINATION of CLARE until 3AM 23:10:96.

... 28 hours after Clare's admission under Dr Steen's care.

At 3AM on 23:10:96, Clare had a 'Convulsion' and started to CHEYNE-STOKE breath. She was transferred to Paed. I.C.U. R&SC and intubated.

4⁰⁰pm 23.10.96 Dr Steen FIRST ATTENDED / EXAMINED Clare.

Papilloedema of the optic discs noted
CT Scan - Done at 5³⁰AM

Show "Cerebral Oedema → coning"

Dr Steen spoke to Parents

8pm: Adjustment to FLUID MANAGEMENT - to Normal Saline

10AM Seen by Dr Bob Taylor

order hypotension: diuretics

Desmopressin.

- Repeat U+E (152)

Osmolality 3.3.

(15⁰⁰) 3pm BRAIN STEM DEATH - PROTOCOL initiated.

Consent for Post Mortem - limited to BRAIN.

18⁴⁵ Artificial Ventilation SWITCHED OFF

- Clare died shortly afterwards

(10)

Dr Steen.

Dr Steen I have prepared a 'DRAFT' Cause of Death
at the request of Mr Lowry (Barrister for Trust)
hmc JL Is there any need for you to refer to
'Epilepsy' since?

(ST) In Dr Webb's statement, he refers to Claire's
response to infection - due to her underlying disorder.
Something in Claire may have trigger her
Status Epilepticus.

JL. Therefore if S-E comes from her past ... it's
not necessary to repeat it.

(ST) Perhaps not.

hmc JL It is like Dr Sanders <Cause of Death> ?

(ST) 'Hyponatraemia' is not put down "per se"

hmc JL Due to excess ADH production.

If C.T. Scan had been carried out (Scanned
by Consultant Neurologist) - would one have
seen Cerebral Oedema, swelling?

Would the diagnosis of hyponatraemia have
been immediately obvious?

(ST) No. Cerebral Oedema may have been due to
meningo-encephalitis - or - Status epilepticus

hmc JL Would you care to comment on the fluid
management between 8pm - (12am) - 2am?

(ST) Saline was prescribed at the normal rate from 12am

hmc JL Do you think that "fluid management" was not an
explanation

(ST) After 11³⁰ - no - it was Normal Saline.

hmc JL In 1996 - was there no issue on fluids?

(ST) This 'Maintenance' was "normal" for her weight.

hmc JL Would you have expected her fluid loss to have
been ASSESSED.

(ST) It's difficult to monitor - urinary output - on nappies

11

Dr Steen

hmc (JL) Was there any system to measure - dry then wet nappies
(ST) only in extreme cases.

hmc JL So urine analysis is fraught with difficulty?

(ST) From 23³⁰ - high levels of ADH were possibly being excreted.

hmc (JL) What should have happened at 3am (23.10.96)?

(ST) At 23³⁰ the bloods (U+E) have been repeated and reassessed. And a consultant on call should have been contacted - Dr Webb was on-call, but I was NOT

Action could then have been taken to reduce the IV infusion to "2/3 Maintenance" rate.

hmc JL And the 3am Na Sodium at (121)

(ST) Claire was probably in PaoD. ICU at that stage and treatment given with MANNITOL to reduce her BRAIN SWELLING.

hmc JL After 3am - fluids were restricted, and

(ST) She was given virtually no fluids except to carry drugs in; Mannitol, Dopam.

hmc JL Would her condition have been retrievable by 3am?

(ST) NO SHE WAS ALREADY MORIBUND!

hmc JL What about 11³⁰ 22.10.96?

(ST) I am unsure, in this case, as there's evidence that her Cerebral Oedema had been going on for sometime.

hmc JL If a child is brought back from 'hypothermia' would there have been further BRAIN DAMAGE on top of her Existing Brain Damage

(ST) Yes.

Why, Dr Steen, do you think she died?

(ST) I assumed 'Cerebral Oedema' due viral infection and status Epilepticus - and that these neurological reasons give rise to excess ADH production which led to fluid retention

(12)

Witness

1996 } MON 21:10 | TUE 22:10 | 23:10 }

Dr STEEN continued

hmc JL (C) Cerebral Oedema due to Status Epilepticus?

(ST) Dr Webb discussed his 'Cause of death' formula as including Status Epilepticus (S-E)

Therefore it was important for the post-mortem to determine the viral illness which triggered the S-E; which caused the ADEs excess to produce (C-O). And so on, spiralling downwards

hmc JL Was Dr McBride correct in referring Claire's death to the Coroner? Dr McBride mentioned "hyponatraemia" as the reason.

(ST) I think that the parental concerns should be taken into account, but I could not RANK the 'hyponatraemia'.

Indeed you could also include ^(hyperkalaemia) HYPER-KALAEMIA < high Potassium (K^+) levels in the blood > for completeness sake... but this is a whole new area.

EXAMINATION by

MR M^cCREA - (Counsel for the Roberts Family)

[M^c] Dr Steen you were the Consultant on take-in from 9am Monday (21:10:96) until 9am Tuesday (23:10:96) responsible for all Medical admissions.

Q WHEN DID YOU FIRST SEE CLAIRE ROBERTS?

(ST) I can't be sure.

I would have been aware of her presence in the ward from 9am on Tuesday (22:10:96).

I can't recollect examining her before 3am (23:10:96)

[M^c] Your first recall is at 3am in intensive care (ICU)

(ST) Yes.

[M^c] Dr Sands was under whose authority Dr Steen or Dr Webb?

(ST) Dr Webb had engaged in her care on Tuesday morning. I contacted the ward that evening (22:10:96).

(13) Dr STEEN continues

(ST) ... Dr Webb had taken over Claire's Management
The junior doctor was concerned about Claire's
neurological status and referred her to Dr Webb
as the Paediatrician concerned with Neurology ...

[MC] You were not contacted until 3am (23.10.96).

Is it not surprising that when Claire's Glasgow

(GCS) Coma Scale began to fall about 8pm (22.10.96)
that Dr Webb was not contacted?

Would you have expected to have been contacted
at 8pm?

(ST) Dr Webb would have been the first point of contact
but the Paediatric Physician thereafter.

By the way, Claire's condition at 8pm, her GCScale
had improved... but by 9pm it began to drop.

[MC] But Dr Webb said "After 8pm GCS deteriorated".

Dr Webb would have been expected to have been
contacted

(ST) At 8pm Claire's GCS was improving, when the
parents were present. But by 9pm GCS
began to deteriorate, PERHAPS from 9pm onward
staff (nursing and doctors) should have informed
the Consultant on call.

[MC] So no one contacted you then; neither you
nor Dr Webb were contacted?

No one called between 9pm (22.10.96) and
3am (23.10.96). By 11³⁰pm Dr Bingham
has given evidence that it was "too late", to
help Claire... Do you agree.

(ST) Yes.

[MC] Did you have any contact with Adam Strain?

(ST) No

[MC] After Adam Strain's death, were there discussion
about children receiving HYPOTONIC IV solutions?

(4)

Dr Steen ... continued

(ST) Adam Strain - was a "High-Output Renal failure" case. Therefore Adam Strain's case was NOT discussed in the hospital, and there was no adjustment to the management of children with other conditions.

[McC] Were any policy or guideline issues discussed before Sept 1996.

(ST) I am not aware of any problem!

[McC] You would have expected to have been made aware and notified?

(ST) YES

[McC] Dr McBride indicated in his letter to the Parents of Claire ... did you see the letter (17:12.2002) before it went out

(ST) No

[McC] Dr McBride wrote

"Our medical case notes may have shown a CARE PROBLEM relating to hyponatraemia in Claire's case"

Do you accept that VIEW?

(ST) Our view was "Meningo-Encephalitis ganglio Status Epileptus and then Cerebral Oedema" and this has not changed significantly since then. However, within the last 5 years, the management would now be different, including fluid restrictions; frequent ure tests; higher Sodium infusion

If Claire's condition were to be managed now it would be very different, but in 1996 1/5 N. Saline was the standard 'Maintenance' treatment

hmc JL So you are saying that in 1996, this fluid management was normal? Had the (ure) been repeated, the fluid would have been reduced from 11:30 pm anyway?

(15)

Dr STEEN continued

[McC] As the consultant on 'take-in' you first examined Claire at 3am on Tuesday. You were not contacted until 3am? - Yet you say that by 11³⁰pm previously - it was "too late" f < to help Claire >.

JL's notes additional to 1st Deposition death (ST) Adam Strain's case was SURGICAL relating to "High Output Renal failure!..a following surgical intervention. I was not aware of ANY R.G. Hospital protocol <in that respect>

THE COURT THEN ROSE FOR 15 minutes

hmc JK It will be recorded that

CLAIRE ROBERT --- address died on 23rd October 1996 in R.B.H.S.C.

I have decided to adopt Professor Young's formula for the "CAUSE of DEATH"

1a - Cerebral - Oedema

1b - Meningo-encephalitis

- Hyponatraemia due to excess ADH
- Status Epilepticus ->

hmc continued with his NARRATIVE of the clinical event [Available from HM Coroner through N.I.C.S.]

I am satisfied that HYponATRAEMIA constituted one of the causes, but it was not the only cause but these would include "Meningo-encephalitis" and Status Epilepticus". Each of the three causes contributed to her death. In Dr Steen's evidence had the cause been noted earlier, her fluids would have been restricted. But by then Claire's condition

(16)

H.M. Coroner's Findings... Continued
was irreversible, even if prompt action had been taken.

As the O'Hara Inquiry is already aware of Claire's death << HMC John Heckey had already been in consultation with Mr John O'Hara before the opening of the Inquiry >> all that I need to do - is to NOTIFY the Inquiry.

I will leave it up to Mr. O'Hara, to decide whether to INCORPORATE ~~REFERENCE~~ CLARE'S death into the HYPONATRAEMIC-RELATED DEATHS IN CHILDREN'S INQUIRY, - IF IT IS WITHIN THE REMIT SET by the MINISTER for HEALTH.

[hmc JL]

Mr Heckey concluded by asking the Roberts family (Claire's father & mother) whether Claire's organs had been donated.

(possibly in an attempt to seek some 'good' coming out of these events and Claire's tragic death) He had failed to check notes before asking this question - There was an embarrassed silence for a short time. Then the family replied [No].

DR. JOHN BURTON

Reynolds

MORNING:

EVENING:

NIGHT: 22/10/10

Admitted from Alderley at 3am
following respiratory arrest.
Intubated and ventilated.
Went to CT scan which showed
diffuse swelling. Brain stem
shifts to 1 position.
for organ donation.

for Hands & Nursing notes

SIGNATURE:

SIGNATURE:

SIGNATURE:

Silvers

D.O.B. / 1961-01-27

097-012-128

[illegible]

RELATIVE COUNSELLING RECORD

CR - PSNI

097-012-129

7

10

097-012-130

CR - PSNI

807

REGULAR PRESCRIPTIONS — DRUG RECORDING SHEET

ATE:

0100 hrs
0200 hrs
0300 hrs
0400 hrs
0500 hrs
0600 hrs
0700 hrs
0800 hrs
0900 hrs
1000 hrs
1100 hrs
1200 hrs
1300 hrs
1400 hrs
1500 hrs
1600 hrs
1700 hrs
1800 hrs
1900 hrs
2000 hrs
2100 hrs
2200 hrs
2300 hrs
2400 hrs

OTHER TIMES

SIG.

SIG.

SIG.

23/10/96

patch

very
sensitive

DRUG SENSITIVITY

[illegible]

Regular Non Parenteral Drugs

[illegible]

u

Roberts Claude

CR - PSNI

11		
10		
9		
8		

CHILDREN'S HOSPITAL *NO*
 Neurology
 Allen, Prof, IV.
 FALLS ROAD
 BELFAST

(1759)

Surname ROBERTS *WR*
 Forename CLATRE
 Age 39 10/01/57 Sex F
 Hosp. No. 228770 - 328770
 Specimen CSF

C.S.F. CULTURE..... NO GROWTH IN 48 HOURS

file
me

* FOR FURTHER INFORMATION, IF REQUIRED... Phone 4150 Page 1 of 1

CHILDREN'S HOSPITAL
Allen Ward

FALLS ROAD
BELFAST

(4827)

Surname ROBERTS
Forename CLAIRE
Age 008 09 10/01/87 Sex F
Hosp. No. 328770
Specimen BLOOD

BLOOD CULTURE..... NO GROWTH IN 7 DAYS

M.

* FOR FURTHER INFORMATION, IF REQUIRED, Phone 4150 Page 1 of 1
SOUTH DUNDEE HOSPITAL BLOOD CULTURE

CHILDREN'S HOSPITAL
Neurology
Allen, Prof, IV.
FALLS ROAD
BELFAST

(3396)

Surname ROBERTS
Forename CLAIRE
Age/DOB 09 10/01/87 Sex F
Hosp.No. 328770
Specimen CSF

ICU

45

CEREBRO-SPINAL FLUID ANALYSIS.

Appearance.....	Bloodstained	!
Supernatant.....	Straw coloured	EXCESS PROTEIN
Protein (g/l).....	95.0	CAUSED BY
(Normal range.....	0.15-0.45)	INFLAMMATION
Globulin.....	Present(+++)	
Erythrocytes (cells/ul).....	300000	
* Leucocytes (cells/ul).....	4000	
Cytology.....	Mostly Lymphocytes	

Clear

* FOR FURTHER INFORMATION, IF REQUIRED, Phone 4150 Page 1 of 1

DATE OF BIRTH 10.01.87 Sex F

WARD ALLEN WARD
HOSPITAL CH
HOSP NO 328770

Royal Belfast Hospital For Sick Children
180 Falls Road
Belfast

IgM

MUMPS Negative
MEASLES Negative
HERPES SIMPLEX Negative
HERPES ZOSTER Negative
CMV Negative

No significant antibody detected.

REPORT DATE
30-Oct-1996

SPECIMEN
Serum

31811

SPECIMEN DATE 21.10.96
RECEIVED 22.10.96

Authorised by
Regional Virus Laboratory

Telephone Direct 894628 or 240503 Ext 2662 / 2712

Fax No 439181
LAB No 3829396

CHILDRENS HOSPITAL

Allen Ward

FALLS ROAD

BELFAST

(1719)

Surname ROBERTS

Forename CLAIRE

Age/DOB 09 10/01/87 Sex F

Hosp.No. 328770

Specimen URINE(M.S.S.U.)

URINE CULTURE..... NO SIGNIFICANT GROWTH

..... < 10,000 orgs/ml

OK

W

FOR FURTHER INFORMATION IF REQUIRED: 0500 4150 Page 1 of 1

PATIENT Claire Roberts

ADDRESS

WARD ALLEN WARD
HOSPITAL CH
HOSP NO 328770

DATE OF BIRTH 10.01.87 Sex F

Royal Belfast Hospital For Sick Children
180 Falls Road
Belfast

Apply

ADENOVIRUS
Q FEVER
PLGV

21.10.96

(40
(40
(40

MYCOPLASMA PNEUMONIAE
INFLUENZA A VIRUS
INFLUENZA B VIRUS

21.10.96

(40
(40
(40

No significant antibody detected.

REPORT DATE
31-Oct-1996

SPECIMEN
Serum

31811

SPECIMEN DATE 21.10.96
RECEIVED 22.10.96

Authorised by: PVC
REGIONAL VIRUS LABORATORY

Telephone Direct 894628 or 240503 Ext 2662 / 2712

Fax No 439181
LAB No 3829396

F. B. I. S. C.
ALLEN HARD

Surname ROBERTS
Forename CLAIRE
Age/DOB 10\01\87 Sex F
Hosp. No. 328770

Admission

ML

SERUM	VALUE	RESULT RANGE
Sodium	= 132* mmol/l	(135 TO 145)
Potassium	= 3.8 mmol/l	(3.5 TO 5.0)
Chloride	= 96* mmol/l	(95 TO 105)
Urea	= 4.5 mmol/l	(3.3 TO 8.5)
Creatinine	= 36* umol/l	(40 TO 110)
Glucose	= 6.6 mmol/l	(4.0 TO 8.0)

@ 10-30 pm

Date of Specimen 21\10\96
S.No. 19924
Date of Report 22\10\96

G.S. Nesbitt
R.V.H. BIOCHEMISTRY

R.D.H.S.C.

INTENSIVE CARE UNIT

DR. P.M. CREAM

Surname ROBERTS

Forename CLAIRE

Age/DOB 10/01/47 Sex F

Hosp.No. 328770

GSN

SERUM	VALUE	ADULT RANGE
Sodium	139 mmol/l	135 TO 145
Potassium	3.0* mmol/l	3.5 TO 5.0
Chloride	103 mmol/l	98 TO 108
Urea	3.4 mmol/l	3.3 TO 8.8
Creatinine	34* μ mol/l	40 TO 110
Ser.Osmolality	287 mmol/kg	285 TO 290

Date of Specimen 23/10/96

Lab.No. 20553

Date of Report 23/10/96

G.S.Nesbitt

R.U.H. BIOCHEMISTRY

TIME ?

PICU
Date/Time Recd 23/10/96 4:20
Date/Time Vetted 23/10/96 4:38
Lab No.: 2387
Auth.: P.B.

NAME : ROBERTS CLAIR
SEX : F
D.O.B. : 10/1/87
HOSP NO. : VCH328770
HOSP/WARD : PICU
DOCTOR : DR MCKEE

161
ASSAY RESULT NORMAL RANGE
PHENYTOIN 19.2 mg/L (10.0-20.0)

No time stated on form.*

10/96 ANTI EPILEPTIC PHENYTOIN

CLIN. CHEM. BCH

R.B.H.S.C.
INTENSIVE CARE UNIT

DR P.M.CREAN

Surname ROBERTS
Forename CLAIRE
Age/DOB 10\01\87 Sex F
Hosp.No. 328770

ML

	VALUE	ADULT RANGE
SERUM		
Sodium	= 152* mmol/l	(135 TO 145)
Potassium	= 2.8* mmol/l	(3.5 TO 5.0)
Urea	= 3.3 mmol/l	(3.3 TO 8.8)
Calcium	= 2.69* mmol/l	(2.10 TO 2.57)
Ser.Osmolality	= 313* mmol/kg	(285 TO 290)

Date of Specimen 23\10\96
Lab.No. 20996
Date of Report 24\10\96

G.S.Nesbitt
R.V.H. BIOCHEMISTRY

TIME ?

R. B. H. S. C.
ALLEN WARD

DR A HICKS

Surname ROBERTS
Forename CLAIRE
Age/DOB 10\01\87 Sex F
Hosp.No. 328770

SERUM
Valproate

=

VALUE
74 mc/l

ADULT RANGE
(50 TO 100)

163
↑ to 2.75 MLS B.D. re 110mg B.D.
from 100mg B.D.

✓
L.A.M.

Date of Specimen 18\09\87
Lab.No. 07068
Date of Report 22\09\87

R.V.H. BICCHEMISTRY

H.S.C.
ALLEN WARD
DR A HICKS

Surname ROBERTS
Forename CLAIRE
Age/DOB 10\01\87 Sex F
Hosp.No. 328770

****PLASMA AMINOACID PROFILE****

PLASMA		umol/L
Threonine	71↓	..
Serine	128✓	..
Glutamine	653✓	..
Glycine	231↓	..
Alanine	274✓	..
Valine	211↑	..
Cystine	13↓	..
Methionine	20✓	..
Isoleucine	55↑	..
Leucine	127↑	..

PLASMA		umol/L
Tyrosine	47↓	..
Ph.alanine	81✓	..
Taurine	----	..
OH-Proline	----	..
Glut.Acid	----	..
Citrulline	30	..
Proline	145↓	..
Ornithine	105✓	..
Lysine	110↓	..
Histidine	96✓	..
Arginine	17↓	..

Date of Specimen 07\09\87
Lab.No. 03627
Date of Report 15\09\87

R.V.H. BIOCHEMISTRY

R.B.H.S.C.
ALLEN WARD

DR A HICKS

Surname ROBERTS
Forename CLAIRE
Age/DOB 10\01\87 Sex F
Hosp.No. 328770

URINE

****AMINOACID CHROMATOGRAPHY****

Normal aminoacid excretion.

****QUALITATIVE URINE ANALYSIS****
pH = 6.5
Protein = -ve
Ketoacids = -ve
Phenylketones = -ve
Reducing Subst. = -ve
Sulphur Compds. = -ve
Mucopolysaccs. = -ve

Date of Specimen 07\09\87

Lab.No. 03621

Date of Report 14\09\87

R.V.H. BIOCHEMISTRY

R.B.H.S.C.
ALLEN WARD
DR A HICKS

Surname ROBERTS
Forename CLAIRE
Age/DOB 10\01\87 Sex F
Hosp.No. 328770

BLOOD	VALUE	ADULT RANGE
Blood Pyruvate =	0.11* mmol/l	(0.04 TO 0.08)
Blood Lactate =	0.7 mmol/l	(0.33 TO 1.33)

Date of Specimen 07\09\87
Lab.No. 05817
ate of Report 10\09\87

R.V.H. BIOCHEMISTRY

R.S.H.S.C.
ALLEN WARD

DR A HICKS

Surname ROBERTS
Forename CLAIRE
Age/DOB 10/01/37 Sex F
Hosp.No. 323770

SPEC. NOT SEPARATED K/PO4/GLUC/LDH INVALID, SV
SERUM USUAL VALUES SERUM USUAL VALUES

Na	142	mmol/l	(135-145)	T.Bil	2*	umol/l	(3-18)
K	---	mmol/l	(3.5-5.0)	Alk.P	260	U/l	(35-120)
Cl	106	mmol/l	(98-108)	GGT	30	U/l	(7-46)
CO2	23	mmol/l	(22-30)	AST	44*	U/l	(10-40)
T.Bil	64	umol/l	(55-90)	ALT	21	U/l	(10-45)
Alb	7*	g/l	(30-45)	LDH	785	U/l	(120-400)
Gluc	---	mmol/l	(4.0-8.0)	CK	21	U/l	(30-140)
Urea	3.9	mmol/l	(3.3-8.8)	Iron	6.7	umol/l	(6.0-30.0)
Creat	25*	umol/l	(45-110)	TIBC	58.7	g/l	(45-72)
Urate	0.18	mmol/l	(0.15-0.53)	%Satn	10*	%	(20-55)
Chol	4.8	mmol/l	(3.3-7.1)	Ca	2.74*	mmol/l	(2.10-2.50)
				Pbcs	2.10*	mmol/l	(0.30-1.55)

Date of Specimen 07/09/87
Lab.No. 00437
Date of Report 08/09/87

R.V.H. BICCHEMISTRY

9	
7	

ROYAL BELFAST HOSPITAL FOR SICK CHILDREN
ALLEN WARD
CONS.

NAME ROBERTS CLAIRE
HOSP. NO CH 00323770
AGE/DOB 10.01.87 SEX F

105

TEST	RESULT	UNITS	REF. RANGE
HAEMOGLOBIN	10.4	G/DL	12-13
ERYTHROCYTES	3.75	MILLIONS/UL	4.0 - 6.5
P.C.V.	.311		0.30-0.54
M.C.V.	82.7	FL	80-99
M.C.H.C.	33.4	G/DL	30-36
M.C.H	27.7	PG	27-33
LEUCOCYTES	10.52	THOUSANDS/UL	4-11
PLATELETS	422	THOUS./UL	150-500

N.

@ 10.30pm 21ST

LAB. ACC. NO. 022203
DATE OF SPECIMEN 21.10.96
DATE OF REPORT 22.10.96

R → W RATIO @ 10.30 pm 21ST.

R 3.76×10^6
W 16.32×10^3

$$\frac{3760}{16.32} = 230$$

R W

ie 230 : 1

R → W RATIO

@ 3.00 am 23RD.

(after hematuria R.C.C ↓)

R 3.66×10^6
W 9.35×10^3

$$\frac{3660}{9.35} = 391$$

ie 391 : 1

CR - PSNI

$$\frac{5250}{7.5} = 700$$

ie 700 : 1

097-012-149

NOMINAL

ROYAL Belfast Hospital FOR SICK CHILDREN
WARD - INTENSIVE CARE UNIT
CONS - MCKE

NAME ROBERTS
HOSP NO 00328770
AGE/DOH 6
CLALRF
SEX F

ABO GROUP A
Rh(D) GROUP POSITIVE
DIRECT COOMBS NEGATIVE

NO ERYTHROCYTIC ANTIBODIES DETECTED

DATE OF BIRTH NOT GIVEN

LAB ACC NO 06/018530
DATE OF SAMPLE 28 10 98
DATE OF REPORT 28 10 98

RICHARD BANE
DEPARTMENT OF HAEMATOLOGY
VERIFIED BY ALAN KEARNEY

ROYAL BELFAST HOSPITAL FOR SICK CHILDREN
INTENSIVE CARE UNIT
CONS.

NAME ROBERTS CLAIR
HOSP. NO CH 00323770
AGE/DOB 10.01.57 SEX F

TEST	RESULT	UNITS	REF. RANGE
HAEMOGLOBIN	10.5	G/DL	12-18
ERYTHROCYTES	5.55	MILLIONS/UL	4.0 - 6.5
P.C.V.	.307		0.36-0.54
M.C.V.	74.5	FL	30-99
M.C.H.C.	34.2	G/DL	30-38
M.C.H	27.2	PG	27-33
LEUCOCYTES	5.54	THOUSANDS/UL	4-11
PLATELETS	339	THOUS./UL	150-500

LAB. REF. NO.
DATE OF TEST
DATE OF REPORT

24-10-76

ROYAL BELFAST HOSPITAL FOR SICK CHILDREN
INTENSIVE CARE UNIT
CONS.

NAME ROBERTS CLAIR
HOSP. NO CH 00323770
AGE/DOB 10.01.87 SEX F

TEST	RESULT	UNITS	REF. RANGE
HAEMOGLOBIN	10.2 ✓	g/dl	12-18
ERYTHROCYTES	3.56	MILLIONS/UL	4.0 - 6.5
P.C.V.	.295 ✓		0.35-0.54
M.C.V.	80.1	FL	80-99
M.C.H.C.	34.3	g/dl	30-38
M.C.H.	27.9	pg	27-33
LEUCOCYTES	9.35	THOUSANDS/UL	4-11
PLATELETS	475 ✓	THOUS./UL	150-500

@ 3am

LAB. ACC. NO.
DATE OF SPECIMEN
DATE OF REPORT

HIGH W.C.C

INFECTION

INFLAMMATION

PHYSICAL/EMOTIONAL STRESS.

ROYAL VICTORIA HOSPITAL
INTENSIVE CARE UNIT
CONS.

NAME ROBERTS
HOSP. NO CH 00328770
AGE/DOB 10.01.87 SEX F

CLAIRE 112

TEST	RESULT	UNITS	REF. RANGE
HAEMOGLOBIN	12.7	g/dl	12-18
ERYTHROCYTES	4.58	MILLIONS/UL	4.0 - 6.5
P.C.V.	.364		0.35-0.54
M.C.V.	79.5	FL	80-99
M.C.H.C.	34.9	g/dl	30-35
M.C.H	27.7	pg	27-33
LEUCOCYTES	5.70	THOUSANDS/UL	4-11
PLATELETS	277	THOUS./UL	150-500

LAB. ACC. NO.
DATE OF SPEC.
DATE OF REP.

* TIME ?

CLAIPE ROBERTS

9 10/01/87

WD/OP: CONSULTANT

DATA SPECIMEN RECEIVED

References

Red blood cells	4.5 - 5.5	millions per cubic millimeter
Hemoglobin	12 - 16	grams per 100 milliliters of blood
Hematocrit	37 - 47	percent
White blood cells	4,000 - 11,000	per cubic millimeter
Neutrophils	50 - 70	percent
Lymphocytes	20 - 40	percent
Monocytes	2 - 10	percent
Eosinophils	1 - 5	percent
Basophils	0.5 - 1	percent
Platelets	150,000 - 400,000	per cubic millimeter
Prothrombin time	11 - 14	seconds
Partial thromboplastin time	28 - 35	seconds
Fibrinogen	2 - 4	grams per 100 milliliters of blood
Bilirubin	0.2 - 1.2	milligrams per 100 milliliters of blood
Alkaline phosphatase	40 - 120	units per liter of blood
Aspartate aminotransferase	0 - 37	units per liter of blood
Alanine aminotransferase	0 - 40	units per liter of blood
Lactate dehydrogenase	100 - 250	units per liter of blood
Creatine kinase	0 - 170	units per liter of blood
Urea nitrogen	7 - 20	milligrams per 100 milliliters of blood
Creatinine	0.6 - 1.3	milligrams per 100 milliliters of blood
Blood urea nitrogen	7 - 20	milligrams per 100 milliliters of blood
Glucose	70 - 100	milligrams per 100 milliliters of blood
Cholesterol	125 - 200	milligrams per 100 milliliters of blood
Triglycerides	0 - 150	milligrams per 100 milliliters of blood
HDL cholesterol	35 - 65	milligrams per 100 milliliters of blood
LDL cholesterol	100 - 160	milligrams per 100 milliliters of blood
VLDL cholesterol	0 - 35	milligrams per 100 milliliters of blood
Protein	6.0 - 8.0	grams per 100 milliliters of blood
Albumin	3.5 - 5.0	grams per 100 milliliters of blood
Globulin	2.0 - 3.0	grams per 100 milliliters of blood
Prothrombin time	11 - 14	seconds
Partial thromboplastin time	28 - 35	seconds
Fibrinogen	2 - 4	grams per 100 milliliters of blood
Bilirubin	0.2 - 1.2	milligrams per 100 milliliters of blood
Alkaline phosphatase	40 - 120	units per liter of blood
Aspartate aminotransferase	0 - 37	units per liter of blood
Alanine aminotransferase	0 - 40	units per liter of blood
Lactate dehydrogenase	100 - 250	units per liter of blood
Creatine kinase	0 - 170	units per liter of blood
Urea nitrogen	7 - 20	milligrams per 100 milliliters of blood
Creatinine	0.6 - 1.3	milligrams per 100 milliliters of blood
Blood urea nitrogen	7 - 20	milligrams per 100 milliliters of blood
Glucose	70 - 100	milligrams per 100 milliliters of blood
Cholesterol	125 - 200	milligrams per 100 milliliters of blood
Triglycerides	0 - 150	milligrams per 100 milliliters of blood
HDL cholesterol	35 - 65	milligrams per 100 milliliters of blood
LDL cholesterol	100 - 160	milligrams per 100 milliliters of blood
VLDL cholesterol	0 - 35	milligrams per 100 milliliters of blood
Protein	6.0 - 8.0	grams per 100 milliliters of blood
Albumin	3.5 - 5.0	grams per 100 milliliters of blood
Globulin	2.0 - 3.0	grams per 100 milliliters of blood

Date of Report: 10/1/80

Report signed by

HAEMATOLOGY

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from the bottom upwards

R.B.H.S.C.
DR HE STEEN
DR MI MCMILLAN

SURNAME ROBERTS
FORENAME(S) CLAIRE
CASENOTE CH 328770
D.O.B./SEX 10-JAN-87 FEMALE
DATE TYPED 23-OCT-96 MG

CAT SCAN OF BRAIN 23-OCT-96 13:07
Diagnostic Code 13.862

There is generalised cerebral swelling with effacement of the cortical sulci as well as the basal cisterns and the third ventricle. No focal lesion has been identified.



R.B.H.S.C.

SURNAME : ROBERTS
OTHER NAMES : CLAIRE-CR
HOSPITAL NO. : CH328770
D.O.B./SEX : 10-Jan-87 / FEMALE
DATE OF REPORT: 10-Sep-87

C.A.T. SCAN OF SKULL 09-Sep-87

Diagnostic Code 10.000

The ventricular system is normal in size, shape and position. No focal lesion is seen.

NN

Emh

COST OF EXAMINATION(S) £103.00

REFERRING(S) C. S. MCKINSTRY

IN SKULL

R.U.H. NEURO RADIOLOGY REPORT