Chester

ORISATION FORM 1

RESTRICTED

INQUEST / PART A / PART B / NFA

Office number: 01572

Date: 23/06/15

Date inquest opened:

OFFICE USE ONLY: ~~Cert 'A'~~ / Cert 'B'

Burial / Cremation Cert to:

CO: KAREN SHAW	*Division:* CHESTER
HMC No: PD	
Mr ☐ *Mrs* ☐ *Miss* ☐ *Ms* ☐	*Married* ☐ *Divorced* ☐ *Widowed* ☐ *Single* ☒ *Separated* ☐
Baby ☒ FEMALE	*Partner* ☐
Surname: Child D	*Forename(s):* BABY Child D
Former name:	
Address: PD PD	
DOB: PD 06/2015 *AGE:* 0	*Place of birth:* CHESTER
Religion: NOT KNOWN	*Occupation:*
GP: DR ELIZABETH NEWBY	*Address / Tel:*
Dr last seen alive by: DR ELIZEBTH NEWBY	*Date:* 22/06/2015
Address / Tel: COUNTESS OF CHESTER HOSPITAL, LIVERPOOL ROAD, CHESTER, CH2 1UL	
Reporting Dr: DR ELIZEBTH NEWBY *Bleep No:* 2 I&S 07 I&S	*Address:* COUNTESS OF CHESTER HOSPITAL, LIVERPOOL ROAD, CHESTER, CH2 1UL
Date of death: 22/06/2015 *Time:* 04:21	*Place of death:* COUNTESS OF CHESTER HOSPITAL, LIVERPOOL ROAD, CHESTER, CH2 1UL
Consultant: DR ELIZABETH NEWBY	*Hospital No:* Personal Data *Date of admission:*
Have the family been notified? YES ☒	NO ☐
Next of kin: Mother D Father D *Relationship:* MUM AND DAD	*Address / Tel:* Personal Data
DOB:	
Name of Spouse (former spouse)	*Occupation:*
Identified by (if different from above):	*Address*

CIRCUMSTANCES SURROUNDING THE DEATH (write additional info overleaf if required)

Child D born at 4pm PD afternoon. 36 hour pre delivery her waters had brokenm, gestation was 37 +1 week, 3.1kg. Mum was induced but the induction was caesarean section. Baby was born in reasonable condition, but at 12 mins of age baby laid in dads arms and had floppy episode and lost colour - PLEASE SEE FURTHER INFO. Cannot offer Cause of Death and Paediatric PM required.

Past Medical History

Medication:	
Recommendation: PM	*Pacemaker:* Yes ☐ No ☐ *Type:*
Reason/s for recommendation: DR CANNOT OFFER COD- SUDDEN AND UNEXPECTED	
Industrial: NO	
Approved by Coroner/Deputy:	*Name:* NLR
PD	*Date:* 22.6.15

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Surname : Child D	Form 92 No : PD
Forename : BABY Child D	DOB : PD 06/2015

ADDITIONAL INFORMATION

INFO FROM DOCTOR

Baby born at 4pm saturday afternoon PD/06/2015 - 36 hour pre delivery mums waters had broken, gestation was 37 +1 week Mum was induced but the induction was caesarean section. 3.1 kg. Baby was born in reasonable condition, good apguards. At 12 mins of age baby was laid in dads arms and had floppy episode and lost colour. Given rescue breaths and bagged briefly, by midwife. Baby Child D quickly pinked up and had good respiratory effort. Baby then started to grunt, began to have respiratory distress, quietly grunting, but seemed well. Couple of hours later paediatric SHO was called as the nurse reported the baby colour was off, baby brought to neonatal unit, baby looked dusky with poor respiratory effort, sats 45%, so baby transferred to incubator bagged & pinked up, Child D was given full infection screen / iv abx. Blood gas showed respiratory acidosis, so instituted respirartory support and started on CPAP and given bolus of fluid. Around 9pm, the gas was improving, but still not good, so night registrar intubated and ventilated 9pm Sat night. Baby well over night, baby weaned very well on ventilator and extubated sunday morning.

Dr Newby saw baby sunday, and though Child D was little bit quiet and little stiff, thought to be clinically septic, but seemed well, brething fine, iv abx increased, planned to repeated gases and bloods soon after extubation. One hour later blood gas after extubation wasnt satisfactory so put back onto CPAP which quickly corrected and she remained in air with no real increased work in breathing. The day registrar inserted umbilical lines for better IV access, and then she remained well over the course of sunday. Then at 1.30am the night registrar was called as she hads become mottled and had tracking, dark brown discoloration - which had resolved after about ten mins. During that episode she had required an increase in oxygen but by the time Dr Newby attended she was back in air- was assumed this was septic picture, added in abx - repeated bloods, and abdo xray, line was was good, bloods were reassuring, her inflammatory markers were ok and her gas was very good. she then went on to have a further episode of discolouration around 3.15am, doing very well at that

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Surname : Child D	Form 92 No : PD
Forename : BABY Child D	DOB : PD/06/2015

point, had become more active, began to be distressed with cpap so this had been taken off, then had episode further of discolouration, given bolus of fluid and that quickly settled, Dr called, SHO was on the ward just before 4am, she went profoundly mottled and apneoic, lost heart rate, SHO and nurse commended CPR and crash bleeped paeidatiric registrar - CPR, asystole protocol, Dr Newby arrived 9 mins into resus, contd 25 mins of resus, 25 mins she had never responded, parents in attendance, discussed with parents that it wasnt appropriate to continue resus. No cause of death.

Reported that this had been 3rd death in 12 days for neonatal. Also a further episode of apneoic event and CPR for previous twin death; surviving twin had successful CPR.

PARENTS DETAILS

Mum
Mother D - DOB PD/09/1982 - I&S
PD

Dad
Father D - DOB PD/3/1984 - I&S
PD

PD

RESULT OF POST-MORTEM EXAMINATION

CONFIDENTIAL – ONLY TO BE COMMUNICATED TO THE CORONER –

Part I

NAME OF DECEASED	Child D	DATE OF DEATH 22.6.15	DATE OF BIRTH PD 6.15
HOME ADDRESS	PD		
PATHOLOGIST	Jo McPARTLAN		
DATE AND TIME OF PM	23.6.15 11am		WHERE PM HELD ALDER HEY

CAUSE OF DEATH

1a)	Withheld pending histology, toxicology and
b)	other investigations
c)	
2	

	MATERIAL RETAINED	PERIOD OF RETENTION	EXPLANATION OF RETENTION (identification / cause of death)
BLOCKS (use continuation sheet if necessary)	See block sheet		COD
WET TISSUE/ WHOLE ORGAN (use continuation sheet if necessary)	none		
TOXICOLOGY (SPECIFY SAMPLE) (use continuation sheet if necessary)	Blood		COD

ANY OTHER INFORMATION (IF HOME OFFICE PM NAME OF S.I.O)

RESULTS OF:
HISTOLOGY WILL BE IN ...6-8... DAYS / WEEKS: ALCOHOL/TOXICOLOGY WILL BE IN.................. DAYS / WEEKS

I CONFIRM THAT NO CARDIAC OR ... IMPLANT REMAINS IN THE BODY.

SIGNED.......... PD CONSULTANT PATHOLOGIST

Part II

I require the above materials to be preserved until (a) the date of Inquest _/_/_ (b) until ______

Part III

Name of Parent/child/spouse/personal representative/any relative desiring to attend PM ______

Address & Tel. No. ______

Spoken to by ______ on _/_/_ at _____ hrs

Selected Option for Disposal (excluding toxicology samples) *(specify if different material retained and the disposal is by different routes)*
(a) retention of the material for review, audit, teaching, research and genetic counselling
(b) return of the material to the family of the deceased
(c) disposal of the material by burial, cremation or other lawful disposal by the pathologist in a sensitive manner
If family are either unable to decide or express no opinion tell the pathologist to retain material; if date of Inquest changes inform pathologist

Dispose of toxicology/microbiology samples as per option (a), (b), or (c) above (ASAP/after Inquest on _/_/_)

The material shall be dealt w... PD ...ith the option selected by the family.

Signed ______ PD ______ H.M. Coroner Medical Research 25/6/15

Print Date & Time: 21/12/2015 09:15

Alder Hey Children's NHS

NHS Foundation Trust

CPA Accredited Laboratory

POST-MORTEM REPORT

Patient Name: Child D

Sex: F

Account Number: I&S

Location: MORT

Patient DOB: PD/06/2015

NHS Number: PD

Unit Number:

Consultant: McPartland,Jo

Specimen Number: PD

Supplementary Report

I have been informed by Dr J Davies, Consultant Obstetrician at Countess of Chester Hospital, that the duration of premature rupture of membranes was 60 hours and not 36 hours. I can confirm that this does not alter my conclusions.

Reported: Dr Jo McPartland, Consultant Paediatric Histopathologist 17/09/15

BIOCHEMISTRY
Dried blood spot – no evidence of a fatty acid oxidation disorder.

Post-mortem details

Coroner's post-mortem? **Yes**

Coroner's district & Tel no.: Cheshire (01 Irrelevant & Sensitive

Coroner: Mr N L Rheinberg

Coroner's Officer: Yvonne Williams (01 Irrelevant & Sensitive

Date of delivery/birth: PD/06/15

Date of death: 22/06/15

Gestational age (wks): 37 **Type of case:** SUDI (Coroners)

Date body received: 22/06/15 **at (hrs)** 1541

Date & Time of PM: 23/06/15 **at (hrs)** 1115

Place: Mortuary, Alder Hey

Pathologist: Dr Jo McPartland (Consultant Histopathologist)

Technical assistant(s): Kate Cannon (APT)

Observers present: None

Referral details

Requesting Consultant: Dr Elizabeth Newby

Requesting Hospital: Countess of Chester Hospital

Ward/Location:

Unit No. PD

Summary of PM Examination

1. Early neonatal death after PD hours of age.
2. A normally growth and developed baby girl with weight on the 91st percentile, length on the 25th percentile and head circumference on the 98th percentile.
3. Acute pneumonia with hyaline membranes, indicating alveolar damage.
4. Placenta not submitted for examination.
5. Toxicology reveals low concentration of free morphine, consistent with medical treatment.

Clinical History

Child D was born at 37+1 gw weighing 3.1kg. Spontaneous rupture of membranes had occurred 36 hours previously. Labour was induced and EmCS was carried out for failed induction of labour. This was the first pregnancy for the mother. The pregnancy was uncomplicated with no known GBS infection and the mother was well in labour. The baby had Apgars of 8 and 9. Initially she had poor colour. At 12 minutes of age she was in her father's arms and lost colour and became floppy and was given 5 rescue breaths and 2 minutes of IPPV and review by SHO was showing good respiratory effort. BM was 4.2. The baby then started grunting in theatre but later the midwife was unhappy with her colour and poor feeding and lack of response to vitamin K and therefore the baby was brought to the neonatal unit. On arrival she looked dusky with poor respiratory effort with initial saturations of 48% and she was transferred into an incubator and given IPPV. She pinked up quickly and started regular respirations. Her venous gas was pH 7.105, PCO2 211.01, BE -7.8 and

bilirubin 92. IV access was obtained for full blood count, CRP and blood cultures and IV Benzylpenicillin and Gentamicin were given in addition to IV fluids and the baby was transferred to CPAP. Phototherapy was started for bilirubin.

A high level of respiratory support was required to maintain oxygen saturations and therefore a decision was made to intubate. Surfactant was administered. The following morning umbilical arterial and venous catheters were inserted. The UVC was only able to be advanced 5cm and was removed. The UAC was inserted to 20.5cm but on x-ray was in too far and was pulled back until sampling at 9cm. On imaging the UAC was thought to be sited as for UVC in the liver. Blood tests revealed a CRP of 6.

At 22.06.15 at 01.40 hrs at approximately PD hours of age, Child D became extremely mottled with tracking dark brown/black lesions across the trunk these were thought to look like evolving purpura most likely secondary to sepsis. Cefotaxime was added to treatment however CRP was still low but PT and APTT were prolonged. The area of discolouration was noted to have disappeared an hour later. At 03.15 hours Child D was upset and de-saturated to 80% in 100% oxygen. Her skin discolouration became more prominent but not as obvious as previously. She was taken off CPAP but then at 03.55 hrs had apnoea and was struggling to saturate. She was re-intubated and given doses of adrenaline and IV fluid via the UVC in addition to sodium bicarbonate but at 28 minutes a decision was made to discontinue CPR.

Authorisation has been received from the Coroner.

Photo documentation-PM

Photographic Documentation?: YES:External/internal
(Digital - JMCP)

X-Ray Examination

X-Ray Examination? Post mortem Skeletal Survey:-
There is quite marked postnatal moulding of the posterior part of the skull; in the lateral projection, the parietal bones appear to overrride the occipital bone, with overlying soft tissue swelling.
No other significant skull vault or skull base abnormality has been identified. A small amount of intracranial air is visible, but this probably represents post-mortem change. No other significant skeletal abnormality has been identified. There are no signs of injury to the spine, pelvis, thorax, or peripheral skeleton, and no evidence of systemic bone disease or skeletal dysplasia.
There is almost complete opacification of both hemithoraces, with air visible only in the central portions of the lungs.