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IN THE CORONERS COURT FOR NORTHERN IRELAND

IN THE CORONER'S COURT IN NORTHERN IRELAND

IN THE MATTER OF BABY L

Before: Coroner Mr McGurgan

Introduction

[1] This is a ruling on a preliminary jurisdictional issue arising from the death of Baby L, who was stillborn on 9th December 2013. An inquest was listed on 11th December 2014 before the then Senior Coroner, Mr. Leckey. The Senior Coroner indicated at that hearing that he was of the view that he may not have jurisdiction to hear the Inquest because of the possibility that this death was a stillbirth which did not meet the definition of a "deceased person" for the purposes of section 7 of the Coroners Act (Northern Ireland) 1959.

[2] Prior to the decision of the Court of Appeal in Re Axel Desmond [2013] NICA 68, the general understanding of the law in Northern Ireland was that – as in England – the Coroner's jurisdiction did not extend to stillbirths. Had the death occurred prior to that decision, the facts and circumstances relating to the death would not have been notified to the Coroner: the body of a stillborn child was not regarded as a "deceased person" for the purpose of section 7 of the Coroners Act (Northern Ireland) 1959.

[3] The Court of Appeal, however, determined that the effect of section 18 (1) (a) of the Coroners Act (Northern Ireland) 1959 (as then enacted) was (at para. 34):

> "to extend the definition of 'deceased person' in the 1959 Act to include a foetus in utero then capable of being born alive. In Rance v Mid-Downs Health Authority [1991] 1 QB 587 it was held that the words 'a child then capable of being born alive' in the 1945 Act [that is, the Criminal Justice Act (Northern Ireland) 1945] meant capable of existing as a live child, breathing

and living by reason of its breathing through its own lungs alone, without deriving any of its living, or power of living, by or through any connection with its mother. We are satisfied that the effect of section 18 of the 1959 Act as enacted is that the Coroner can carry out an inquest into a foetus in utero falling within that definition."

[4] The question that arose in this case was whether, on the evidence available to the Senior Coroner, the child was in fact "capable of being born alive". If not, the child would not fall within the above definition with the consequence that the Coroner would not have jurisdiction to hold an inquest into the death. As a result the Inquest was adjourned pending legal submissions from properly interested persons on this preliminary jurisdictional point.

[5] Written submissions were received in the first instance from the Attorney General for Northern Ireland dated 30th January 2015, the Belfast Health and Social Care Trust dated 12th January 2015 and the next of kin dated 22nd February 2015.

[6] The Senior Coroner had been furnished with all relevant documentation relating to the stillbirth, including (a) the post-mortem report of Dr. Claire Thornton Paediatric Pathologist dated 19th February 2014, (b) the statements of medical staff and the child's parents, (c) medical notes and records relating to the pregnancy and the delivery and (d) other correspondence and documentation touching on the matter. The circumstances of the stillbirth had given rise to an internal investigation and the Senior Coroner was in receipt of the resulting Root Cause Analysis Report on the Investigation of a Serious Incident dated 9th July 2014.

[7] To assist the Senior Coroner with the determination of the jurisdictional question, those involved in the delivery and in the post-mortem were asked to address specifically the question of whether Baby L had been "capable of being born alive". Dr Anne Harper, Consultant Obstetrician and Gynaecologist and Duty Consultant on the day of delivery, provided a brief report dated 2nd April 2015. Dr Thornton, who carried out the post-mortem, provided a further report dated 21st May 2015. Dr Stanley Craig, Consultant Neonatologist, who attended at the delivery and examined the body after the stillbirth, provided a report dated 21st April 2015.

[8] The Senior Coroner also instructed an independent expert, Professor Paul Winyard, Professor of Paediatric Education at University College London. Professor Winyard was provided with all relevant materials and he provided a report dated 19th October 2016 and an addendum dated 7th February 2017.

[9] An oral hearing was held before me on 11th April 2017, in which the three Consultants and Professor Winyard gave oral testimony and were questioned by counsel for the Coroner, counsel for the next of kin and counsel for the Trust. I was also in receipt of a supplementary written submission on behalf of the next of kin prior to the hearing on 19th January 2017 in response to Professor Winyard's report. Following the hearing, the Trust and the next of kin also made further written submissions based on the evidence.

[10] I have considered all of the above written material and the oral evidence in reaching my conclusion and I have had the benefit of a transcript of the oral hearing to which I will refer in the course of my ruling.

[11] The Coroner was represented at the hearing by Mr Sean Doran QC. Mr Peter Coll QC and Mr Michael McCartan BL appeared for the next of kin. Mr Michael Lavery BL appeared for the Trust. I am indebted to counsel for the very helpful submissions in relation to the matter and also to the Consultants and Professor Winyard for their assistance to the Court.

Factual background

[12] Baby L was stillborn on 9th December 2013 at Royal Jubilee Maternity Hospital in Belfast. The post-mortem report revealed a growth restricted pre-term male baby with severe congenital abnormalities. His mother was counselled throughout the pregnancy about the very poor prognosis. At 31 weeks gestation, on 3rd December 2013, she attended an appointment with her consultant Dr Ong. At this consultation she asked whether a Caesarean section would be an appropriate method of delivery. It was explained that a Caesarean Section would not result in a better outcome and as a result she agreed to proceed with induction at 38 weeks. She also agreed that the baby would not be monitored during labour.

[13] On the 8th of December 2013, she presented to hospital this being almost 32 weeks gestation. She was in early labour. A scan picked up the maternal pulse and an abdominal ultrasound showed a foetal heart rate of 155 BPM. At approximately 9.30am on 9th December 2013, the mother was transferred to the delivery suite. The foetal heart rate was not examined at this stage in accordance with the mother's wishes but foetal movements were noted by midwives at 9.45am. In the afternoon, it was recorded by staff that no foetal movements were felt, although the mother reported some foetal movement at 5pm.

[14] The post-mortem report records that the cervix was fully dilated at 6.30pm and the head of the baby was delivered by the midwife at 8.25pm but unfortunately as further attempts were made to progress the delivery the head of the baby became detached and fell away from the body. It is recorded that there was no bleeding from the neck at that time. The mother was transferred to theatre and following the draining of the foetal bladder the body of the child was delivered.

[15] The cause of the baby's death is recorded in the post-mortem report as Eagle-Barrett syndrome. The final diagnosis is recorded as "bladder outflow obstruction, Potter's sequence, Eagle-Barrett syndrome, anorectal agenesis with rectovesical fistula". I will return to this particular issue later in the ruling.

The Law

[16] As I have indicated at paragraph [3] above, the Court of Appeal in Re Axel Desmond [2013] NICA 68 determined that the effect of Section 18(1)(a) of the Coroners Act (Northern Ireland) 1959 was to extend the definition of "deceased person" in the 1959 Act to include a foetus in utero then capable of being born alive.

[17] Article 2(2) of the Births and Deaths Registration (Northern Ireland) Order 1976 defines a stillbirth as:

> "... the complete expulsion or extraction from its mother after the twenty-fourth week of pregnancy of a child which did not at any time after being completely expelled or extracted breathe or show any other evidence of life."

[18] The Coroner's statutory jurisdiction to hold an inquest is derived from section 7 and section 13 (1) of the 1959 Act, as interpreted in the light of the Court of Appeal's decision in Re Axel Desmond. Section 7 reads:

> "Every medical practitioner, registrar of deaths or funeral undertaker and every occupier of a house or mobile dwelling and every person in charge of any institution or premises in which a deceased person was residing, who has reason to believe that the deceased person died, either directly or indirectly, as a result of violence or misadventure or by unfair means, or as a result of negligence or misconduct or malpractice on the part of others, or from any cause other than natural illness or disease for which he had been seen and treated by a registered medical practitioner within 28 days prior to his death, or in such circumstances as may require investigation (including death as a result of the administration of an anaesthetic), shall immediately notify the coroner within whose district the body of such deceased person is of the facts and circumstances relating to the death."

[19] Section 13(1) reads:

> "Subject to subsection (2) a coroner within whose district-
>
> (a) a dead body is found; or
>
> (b) an unexpected or unexplained death, or a death in suspicious circumstances, or any of the circumstances mentioned in section 7, occurs;
>
> may hold an inquest either with a jury or, except in the cases in which a jury is required by subsection (1) of section 18, without a jury."

[20] In the original written submission, counsel on behalf of the next of kin submitted that, having regard to the evidence in this matter, there was good reason to believe that the death resulted as a result of "negligence or misconduct or malpractice" and therefore met with the criteria for death to be reported for the purposes of section 7. It was submitted that that in turn brought the death within

the category of cases in which the Coroner may hold an inquest. It is clear, however, that notification to the Coroner per se does not confer jurisdiction to hold an inquest. If, as a matter of fact, the foetus was not capable of being born alive, then the jurisdiction to hold an inquest would not exist. The fact that the child was "capable of being born alive" is a precondition to the establishment of jurisdiction.

[21] Regarding the question of whether the child was capable of being born alive, the Court of Appeal in the Desmond case referred to definition given in the judgment of Brooke J in Rance v Mid-Downs Health Authority [1991] 1 QB 587. Brooke J stated that the child was capable of being born alive in the following circumstances (at 621):

> "if, after birth, it exists as a live child, that is to say, breathing and living by reason of its breathing through its own lungs alone, without deriving any of its living or power of living by or through any connection with its mother."

[22] Girvan LJ clarified the meaning of the expression "capable of being born alive" in R v McDonald [1999] NI 150. This was in the context of the judge's direction to the jury concerning criminal offence of child destruction. The references to the criminal standard of proof are therefore not apposite to the issue that I must determine, but the properly interested persons agreed that Girvan LJ's formula captured the constituent elements of "capable of being born alive" (at 157):

> "The Crown must satisfy you beyond reasonable doubt that the baby was capable of being born alive. In this context 'capable of being born alive' means that the child, at the point immediately before the defendant's act destroyed its existence, had the real chance of being born and of existing as a live child, that is to say living and breathing through its lungs (either naturally or with the aid of a ventilator) alone without deriving any of its living or power of living by or through any connection with the mother. In this context the Crown does not have to prove that the baby would have lived for any particular period of time provided that it is shown that the baby would have lived even for a short period of time."

[23] Reflecting on the above, there are three important propositions on which all properly interested persons agreed and which I regard as correct in law. First, the potential duration of life is not a material factor in determining whether the child was capable of being born alive. Secondly, a child would be capable of being born alive even if a ventilator would be required to sustain life after birth. Thirdly, the question is not whether the death actually occurred in utero but whether the child was capable of being born alive. If the simple fact that the death occurred in utero were regarded as determinative, that would entirely undermine the decision of the Court of Appeal.

[24] Regarding the appropriate standard of proof, I find that the normal civil standard of proof should apply, that is that the Coroner should determine the

question of whether the child was "capable of being born alive" on the balance of probabilities.

The Evidence

[25] Dr Anne Harper was duty consultant on the labour ward on the day in question. As a result she had overall responsibility for the delivery of the child. In a brief report dated 2nd April 2015, she stated as follows:

> "My view is that [Baby L] had very severe multiple congenital anomalies that were lethal, completely incompatible with extra-uterine life and that he was not capable of being born alive."

[26] When questioned by Mr Doran QC on behalf of the Coroner, Dr Harper stated:

> A. Well I am still of the conclusion that the child was not capable of being born alive.
>
> Q. Have you addressed the question for example of whether the child was capable of breathing independently of its mother?
>
> A. Well, in this particular condition where you have pulmonary hypoplasia where the lungs are very, very tiny, and in fact I think if you look at one of the scan pictures you can see that there is practically no thorax at all, no lung tissue at all. I think that's borne out in the postmortem report where the lungs weighed, very, very much less than they would have been expected for that gestation. They would be far less than an ounce, very tiny, five grams, I think around five grams. That would have been completely incapable with breathing or possibly even expansion of the lungs. So I still think the baby was not capable of being born alive.
>
> Q. When you say incompatible with breathing, do you mean at any stage after birth?
>
> A. At any stage. I don't think it would have been able to take a first breath.

[27] Dr Harper was also of the view that even if the baby's abdomen had been drained, that would not have rendered it more likely that the child could have been born alive, even for a very short period of time. She opined that the combination of complicating factors around the birth in this case, in addition to the child's abnormalities, rendered it "virtually impossible" that the child was capable of being born alive.

[28] Mr Coll QC on behalf of next of kin challenged Dr Harper on the absence from the clinical notes of any suggestion that the death was to be an intrauterine death. Dr Harper conceded that death in utero was not recorded in the notes as being inevitable, but her evidence remained that it was virtually impossible that the baby would be born alive:

> A. Well we don't normally write that sort of thing in the notes to be honest, you know. You know when I say 99%, you are still leaving 0.1, 1% chance that perhaps we are wrong. We only make antenatal diagnosis. We don't know the pathology. We don't know. So you know nothing is ever completely black and white. But when I say virtually impossible, you know that's what I mean. It was pretty much inevitable that this baby wasn't going to survive.

[29] When questioned by Mr Lavery BL on behalf of the Trust, Dr Harper maintained that she did not believe that Baby L was capable of being born alive, having regard to the test that had been explained to her.

[30] In her evidence to the Preliminary Hearing, Dr Claire Thornton, Consultant Paediatric Pathologist, confirmed that she performed a post-mortem on the 10th December 2013 and produced a post-mortem report on the 19th February 2014. Dr Thornton further confirmed that she produced a second report on the 21st May 2015 following a request from the then Senior Coroner, Mr Leckey. In that report Dr Thornton stated:

> "I have reviewed my findings at autopsy and am of the opinion that it is highly unlikely that this baby could have been born alive…"

[31] Dr Thornton went on to advise:

> "[T]he baby's problems were compounded by intrauterine infection. This had been present for at least several days and there is evidence of the baby responding to the infection. Sepsis, even in a baby without any congenital abnormalities, is a well recognised cause of intrauterine death. It causes acute hypoxia, brain damage and shock. It is highly likely that infection initiated the onset of preterm labour and at the same time led to foetal hypoxia, causing the baby to be unable to withstand the stress of labour. There may also have been reduced placental reserve as result of the villous maturation defect."

[32] In response to questioning by counsel to the Coroner, Dr Thornton expanded on her opinion regarding capability of being born alive:

> A. Well this baby had severe, very severe pulmonary hypoplasia so this baby could not have sustained life for any length of time. Sometimes a

baby with lethal pulmonary hypoplasia may gasp at birth but they will require mechanical ventilation to, you know, to stay alive. This baby's lungs were, well there is a definition we'll see in the postmortem report. We look at the lung weight to body weight ratio and there is a cut-off point below which the lungs are insufficient to support life. This baby's were extremely small. If you look at the ratio 0.003 rather than 0.125. So this baby would not have survived. I cannot say that he would not have gasped. But if we are doing it on the grounds of probability as opposed to is there an outside chance, I do not believe that this baby had a real chance of being born alive.

Q. But is it correct to say that you are not entirely ruling out the possibility?

A. No one can. Medicine is not 100% certain.

[33] Dr Thornton was asked about a passage in the post-mortem report in which the following sentence appeared: "Had this baby been live born the lungs would have been unable to support life." In the earlier written submissions by the Attorney General and on behalf of the next of kin, it had been suggested that this sentence impliedly supported the proposition that the child was capable of being born alive, even if only for a short period. Dr Thornton was asked to comment:

Q. I wonder could it be said that that's an implicit acceptance on your part that the child was in fact capable of being born alive?

A. There is an outside chance. If I was a betting man, do you want me to say 99% chance that he would have died in utero, 1% chance that he was born alive. So I have just said that had he been born alive, if he was that 1% that might have been born alive.

[34] Dr Thornton said that the presence of foetal movement in the course of the day of delivery would not change her view on the matter. She also suggested in her evidence that the presence of the infection reduced the possibility of the child being born alive. She further indicated that the drainage procedure, rather than increasing the likelihood of the child being born alive, could possibly have precipitated death in utero, having regard to the volume (which she described as "massive") of fluid that was present.

[35] Under questioning by Mr Coll QC, Dr Thornton stated that there was an outside chance that the baby could have given a gasp, but advised that "in all probability this baby would not have breathed at birth." Mr Coll suggested to Dr Thornton that the real impact of factors analysed in her report such as lung volume and lung ratio was on the issue of sustainability of life as distinct from the issue of whether the baby was capable of being born alive:

Q. … so whenever your report, based on the analysis of the lung volume

and the lung ratio, the real impact of that as you have told us now is about his sustainability and we're dealing with sustainability here. We are dealing with whether he be capable of being born alive. So the issues about lung weight and ratio weight actually aren't relevant to the question at hand, isn't that correct?

A. Probably not. Well there are too many issues involved. It is not just his lungs. He has got multiple congenital abnormalities of his genital urinary tract. He has also got two litres of fluid in his abdomen. He has also got intrauterine infection and he has preliminary hypoplasia. So there are multiple pathologies at work and when you put them all together then what I am suggesting is that there is on the ground of probability he would be highly unlikely not [sic] to have been born alive.

[36] Dr Thornton clarified that she meant to say "highly unlikely to have been born alive". She was also challenged on why the intrauterine infection had not been recorded as a cause of death in the post-mortem report. She explained that all attention at the time had been focused on the baby's abnormalities and on what happened at the time of delivery. She said that it "was not going to change the outcome".

[37] Dr John Stanley Craig , Consultant Neonatologist, confirmed that his primary role within the maternity hospital is to care for infants in the neonatal intensive care unit and to be in the delivery suite when infants expected to be unwell required to have medical assistance prior to admission to the neonatal unit. He would attend the delivery suite at the request of obstetric or midwifery staff.

[38] In response to questioning by Mr Doran QC concerning the medical conditions that were present in the case of this child, Dr Craig said:

A. … there was a small chance that [Baby L] could have been born with signs of life and that's why I was there, because if there was signs of life there was a request to undertake resuscitation which is what our job is.

[39] Dr Craig agreed that infants with those conditions would often or usually die stillborn but that not all infants with those conditions would inevitably die in utero. When asked about the legal definition of "capable of being born alive", he explained that the key issue from the perspective of clinical decision making was whether there was a heart rate rather than whether there was breathing.

[40] In the course of questioning by Mr Coll QC on behalf of the next of kin, Dr Craig addressed the possibility of the child being born alive as follows:

Q. … So your position in respect of this seems to me to be that you were expecting at least that [Baby L] would be born alive, or it would be

possible that [Baby L] would be born alive in the sense of having signs of life?

A. Yes. There was, you know, we were asked to be there. There was, as has been mentioned already, life in medicine, illness in medicine is never 0%, 100%, so by nature of it never being 0% (A) you have to be there and (B) you have to be prepared to deal with that small percentage. Equally, as I have been trying to explain, you have to prepare parents for either possibility being present. So, yes.

[41] Dr Craig said that he could not categorically say that Baby L did not have a small chance of coming out with a heart rate and making breathing effort, but he referred to the likelihood of the child being born alive as "very small".

[42] He was asked by Mr Lavery BL to comment on Dr Harper's use of the term "virtually impossible":

Q. You were in Court when Dr Harper gave her evidence. Would it be fair to say in terms of where you stand in terms of whether the baby was capable of being born alive, Dr Harper says that is virtually impossible; would you agree with that or is just really a matter of degree in the sense that you think it is possible?

A. I think it is a matter of degree. I have used the phrase, you know, less likely or much less likely.

[43] Professor Paul Winyard is a Professor of Paediatric Education at University College London and has extensive academic and clinical experience in paediatrics. Professor Winyard and colleagues established an antenatal Nephrology-Urology clinic in the Fetal Medicine Unit at University College Hospital in 2001. The clinic has been held one or twice a month since then. In his first report, he described the antenatal presentation of Baby L as very typical for his clinic. I was not invited to call any other independent expert to address the issue arising in this case.

[44] Professor Winyard stated in his report that, in his professional opinion, Baby L had fatal lung hypoplasis secondary to prolonged oligo-anydramnios as a result of lower urinary tract obstruction. He said that there were no interventions proven to correct abnormal pulmonary development from such an early stage of development, whilst abdominal drainage pre-labour could not have had any effect on such critically impaired lung function.

[45] In his addendum, he stated his view that Baby L never had the ability to breath sufficiently to support life, in that "the reduced development of his lungs had already caused irreversible cessation of <u>effective</u> breathing before birth." The addendum concluded:

"In summary, your specific question on whether [Baby L] was capable of being born alive hinges on the definition of life/ alive versus death. None of the conventional medical definitions fit clearly here and I am not sure whether there are any legal definitions which supersede these. If yes, please let me know and I can comment further. If no, then it remains my view that [Baby L] was not capable of surviving independently outside the womb i.e. that birth was incompatible with sustaining life."

[46] In his evidence to the hearing, Professor Wynyard, having been referred specifically to the legal definition of "capable of being born alive" as explained by Brooke J in Rance and Girvan LJ in McDonald (above) and after hearing the evidence of the other witnesses, advised the Court as follows:

A. … actually the answer is it is not capable of being born alive because while the baby is in the womb oxygenated blood is supplied by the umbical [sic] cord. When the baby comes out the cord is effectively clamped, the baby needs to breathe to get oxygen into the system to support life. So the definition here says, and I can read it, it means that the child at the point immediately before the (inaudible) act destroy its existence have a real chance of being born and of existing as a live child. This is the crucial sentence. That is to say breathing and living by reason of it breathing through its lungs. We know from predictions beforehand that the lungs would not be sufficient to support life but that is not the question. The question is would the lungs be sufficient to inflate and support life for a short time after birth. It is my view from Dr Thornton's report on the tiny, tiny lungs that actually this criterion is not met. Breathing and living by reason of its breathing through its lungs would not be met as a criterion.

Q. Can you comment on the possibility of this child sustaining life after birth even if for a short period?

A. Well that is not what this – that's not what that definition says. It says actually breathing and living by reason -- breathing by reason of its breathing so a child would survive –

Q. When I asked the question I should say I mean by reference to that definition?

A. Yes. But effectively a child is born with oxygen in its system which is being provided by the umbical [sic] cord from mother. So while that oxygen is there the baby will survive and it will have a heart rate, as Dr Craig said, but when the baby cannot inflate its lungs because the lungs are so tiny then it will die and, as Dr Craig said, the heart rate will slowly decrease and the baby will cease to be.

[47] He was asked about the distinction between heart beat and capacity to breathe:

> A. Okay. So the heart is a muscle which will beat when supplied with oxygen. It will still continue to beat when oxygen levels are reduced. So when the baby comes out of the womb and the cord is disconnected there is oxygen circulating around the baby's blood stream and the heart will work, then the lungs need to take over and start supplying oxygen to keep the heart functioning and to keep the brain functioning and everything else functioning. But if the lungs are too small (A) they won't inflate and (B) they weren't getting oxygen into the system. It is almost as though the baby is connected to a life support machine when in the womb because of the umbical [sic] cord. When the baby is out the womb it is cut off from the life support and the baby will die.
>
> Q. Are you saying then that one can have a heart beat but not the presence of independent breathing?
>
> A. Yes, absolutely. So this in a way is why that definition is, as Dr Craig pointed out, is not perfect in terms of a medical view.

[48] Professor Winyard went on to distinguish between a gasp and effective breathing:

> A. The earlier questions specifically asked whether the baby might gasp, and I suspect the baby would gasp actually, but that does not mean that the baby is effectively breathing. So if I gasp it doesn't mean I am getting oxygen into my lungs.

[49] He agreed that the carrying out of a drainage procedure would not have increased the likelihood of the child being born alive, even if only for a short period:

> A. Correct. The fundamental defect is in lung development, so the lungs don't suddenly weigh more because you have drained the abdomen. I think we need to put this into context. If you think about a normal baby's lungs and the volume of normal baby lungs, it is probably the same as two adult male fingers. The size of this baby's lungs were the size of just the very tip of one of your fingers, so a sixth of the size. That tiny, tiny size is not capable of effective breathing.

[50] Professor Winyard also addressed the added risks of death during labour, such as cord compression and other complications in delivering the foetus, in the case of a child with Baby L's conditions. He suspected that if such risks did not cause the baby to die, then the baby would probably be born with a heart beat and gasp but that this would be a "gasp without effective breathing." He was asked

again, for the avoidance of confusion, whether in his professional opinion this child was capable of being born alive in accordance with the definition that had been read at the outset of the hearing. Professor Wynyard replied "no". He explained that as soon as the umbilical cord's oxygen supply is reduced the baby is "condemned not to breathe effectively." He referred to two points about the delivery which were atypical in this case, the massive abdomen – he had never seen an abdomen of this size and described the abdominal girth as "astonishing" – and the abnormal contractures to which Dr Harper had drawn attention.

[51] In the course of examination by Mr Coll QC on behalf of the next of kin, the question arose as to whether the possibility of delivery by caesarean section might have impacted upon the capability of the child to be born alive. Mr Coll's instructions were that the mother had wanted a caesarean section but had been told by Dr Ong that he was not in favour of taking that course. The following exchange occurred between the Coroner and the witness:

> Q. Does the same principle apply whether it's vaginal delivery or C-section with regards to your very clear picture that you've drawn in my mind. The umbilical cord is the life support machine for the baby and if it is delivered by caesarean section does the same principle apply, the cord is clamped and the life support machine effectively is gone because really the problem here is the lungs?
>
> A. Yes, absolutely.
>
> Q. Is this debate about caesarean section and vaginal delivery relevant to my consideration with regards to the capability of being born alive?
>
> A. No. In fact actually the obstetrician, again this is hearsay -- I am not obstetrician but I have been in enough counselling to say what they say, which is actually babies breathe much better when they go through a vaginal delivery because it is more stimulating. They are prepared, they have gone through the phrase of contraction and they are more likely to breathe if you go through normal delivery rather than caesarean where it is a bit of a surprise to a baby if a baby comes out and has to start breathing.

[52] Professor Winyard was also asked by Mr Coll about his oral evidence concerning the specific application of the legal test of "capable of being born alive", as distinct from his analysis of the case in his initial report. The following exchange occurred:

> Q. Okay. Your point then today is having heard the extrapolation of that test that has been developed in law, that you place a focus on what you have said in your addendum report in any event about effective respiratory function?

A. Yes.

Q. In other words, that even if the child gasped and even if that reflex reaction took air into the windpipe and into the lungs, the lungs would not inflate and he would not be able to –

A. You are putting words into my mouth. I didn't say the lungs would inflate. I said there wasn't sufficient lung tissue there to sustain oxygen transfer.

Q. I beg your pardon, I am sorry, I thought that you did. Sorry, just to be clear about this. I thought that you did say that the lungs were insufficient to inflate and support life. That's the note that I have from what you said earlier.

A. There's so little lung tissue there that you cannot actually get oxygen, enough oxygen through to support the heart beat and the functions of life.

Q. Yes, exactly, and you would die as a result?

A. I don't know if we're at semantics here, but that was my view.

Q. But it would be possible, it would be possible for air to go into the lungs?

A. Yes, probably.

Q. Your point is that the lungs are not of sufficient size for them to effectively transfer the oxygen in the air into the blood stream in a gaseous exchange?

A. Yes.

Q. But it is possible that in the sense of a breath that one could breathe, the air would go into the lungs but it just wouldn't translate into an oxygen exchange?

A. Sorry, say that again?

Q. It is possible that the child could have breathed by way of a reflex reaction?

A. Yes.

Q. That air would have gone into the lungs. Your point simply is that the lungs were not efficient in promoting a gaseous exchange?

A. It is not efficient, it is sufficient.

Q. I am using the word 'efficient' because you talk about effective respiratory function, so I am putting the word 'efficient'. It would not have been efficient enough to have conducted the respiratory function and transfer the oxygen?

A. I don't agree with the word. I think the word is sufficient. There is actually not enough lung tissue there to supply the amount of oxygen required to maintain the heart rate or any element function.

Q. That is a further elaboration then because that would mean that it would be possible for the air to go into the lungs, for the air to, or the oxygen in the air to conduct or participate in the gaseous exchange. There just simply wouldn't be enough lung tissue present to allow sufficient oxygen to maintain the cardiovascular system and the heart rate would stop?

A. Yes, correct.

Q. So the child could, technically could possibly breathe, could technically engage in a gaseous exchange, it is just simply that there wouldn't be enough oxygen exchanged because the lungs were too small?

A. Correct. So that by the legal definition of breathing and living by reason of its breathing I think that the child is not alive, but that is my view. Sorry, I am not a lawyer really.

Q. Technically, of course, while all this is happening, while this effectively, and one has to be blunt about it, this process of death is underway, until such time as the heart rate stops the heart is still beating, there is a heart rate?

A. Yes. I don't know. That's a legal definition. I don't know.

Q. With respect I don't think it is a legal definition. I think it is a medical question, is it not? If one is born the heart rate or the heart beat to that time has been supported by the mother, the life support system through the umbilical cord and placenta, et cetera. If one is separated from that the child is able to breathe. There is a gaseous exchange, it is just simply not sufficient to maintain the heart rate. Until such time as the heart rate stops the heart is still beating?

A. That statement is correct but it is not maintaining life, as it says, breathing and living by reason of breathing alone. It doesn't meet that criteria, in my view.

Q. Because the lung function is not good enough and the child will die, it is only a question of time?

A. Well it's a question of whether the child is alive to start with, which is going back to that legal definition.

Q. If you had a hypothetical child where the lungs were bigger than [Baby L's] lung but not big enough to sustain life and it was felt that ventilation wasn't going to be useful or appropriate, then that child is similarly going to die. It might live for minutes, moments, seconds, but it is still going to be alive?

A. Yes, possibly.

Q. Thank you.

A. But it goes back to the definition, the real chance of being born and of existing as a live child. I am afraid I am not qualified to comment on that. It is a legal definition.

[53] In questioning by counsel for the Trust, Professor Winyard maintained that, having regard to the legal definition, Baby L was not capable of being born alive. At the conclusion of his evidence, Professor Winyard was asked by counsel to the Coroner to clarify his evidence relating to the capacity of the lungs:

Q. Yes, Professor Winyard, just to clarify. Are you saying that this baby's lungs would not be capable of filling with air?

A. Yes. It is the point about degree. So the lungs were tiny, 1/6th of the size, so they may actually take in air but the amount of air and gas exchange which would take place would be insufficient to support life. And that is irrespective of whether the child was ventilated or not because a ventilator can only blow air into the lungs that are there, it can't make new lung tissue.

Q. So you are saying that the child could not have supported life independently of its mother; is that correct?

A. Yes, that's my view.

Discussion

[54] It was submitted on behalf of the next of kin that, while there was sufficient evidence for the Court to be satisfied that Baby L was incapable of continuous breathing to the extent that life could have been sustained for any significant period, the Court could nonetheless be satisfied that Baby L was "capable of being born alive" in accordance with the legal definition. The submission relied on the fact that resuscitation attempts were anticipated and that the passage of air into the lungs was possible, which the submission describes as "technically breathing".

[55] It was further submitted on behalf of the next of kin that, if the Court did not agree with the foregoing submission on the evidence, it would be "reasonable for the Court to adopt a broader and more purposive approach to the application of the Rance test in this case". The basis of that submission was that the intention of the legal test was to provide to the unborn child, capable of being born alive, the same right to be considered a "deceased person" under the Coroners Act (Northern Ireland) 1959 as a child, in the same condition, born alive who dies very shortly thereafter. The submission also accepted, however, that "the Rance test is the legal test that must be applied to the medical facts and expert opinion in this case". It was submitted that "on the balance of probabilities and all other things being equal", the child was capable of being born alive and of taking a breath.

[56] It was submitted on behalf of the Trust that, based on the evidence, the child was never capable of being born alive and therefore did not fall within the definition of "deceased person" for the purpose of the Coroners Act (Northern Ireland) 1959. It was submitted that, even if there might possibly be a single gasp of breath, that could not equate to a process of respiration for the purpose of the legal test of whether the child was "capable of being born alive".

[57] In a response to the Trust's submission, it was submitted on behalf of the next of kin that the trauma endured by the child during labour should not have occurred and that a less stressful birth could have resulted in the baby being born alive, if only for a short while; but for the acts and omissions of the medical staff, it was argued, the child was capable of being born alive.

[58] The result of the Court of Appeal's decision in the Desmond case was that the definition of "deceased person" in the 1959 Act includes a foetus in utero "then capable of being born alive." The Court of Appeal adopted the meaning of those words as explained by Brooke J in Rance. The term was also clarified in this jurisdiction by Girvan LJ in McDonald. It seems to me that the legal definition of "capable of being born alive" as set out in those decisions is clear. I remind myself of the three important propositions that flow from this definition, as set out at paragraph [23] above. First, the potential duration of life is not a material factor. Secondly, a child would be capable of being born alive even if artificial means would be needed to sustain life after birth. Thirdly, the question is not whether the death actually occurred in utero but whether the child was capable of being born alive. In this case, it appears clear from the evidence that death had actually occurred in utero

prior to the point at which the head became detached, having regard to the absence of blood at that time. That is not, however, determinative of the question that I must address.

[59] I am not persuaded that I should approach the Rance test in any different way for the purposes of this case. The test has been endorsed by the Court of Appeal in the context of a case that dealt squarely with the question of whether the jurisdiction of the Coroner extended to a stillbirth. The jurisdiction extends only to the foetus in utero falling within that definition.

Finding

[60] I must now determine, having regard to the evidence, the question of whether this child was "capable of being born alive". As I have said, in determining that question, I must apply the normal civil standard of the balance of probabilities.

[61] Before I address this question directly, I wish to make two points relating to the potential method of delivery that arose in the evidence. First, the question arose as to whether the adoption of a drainage procedure would have impacted on the possibility of Baby L being born alive. I am satisfied that the evidence of Dr Harper, Dr Thornton and Professor Winyard establishes that the adoption of such a procedure would not have increased the likelihood of the child being born alive. Secondly, the issue arose in the evidence of Professor Winyard as to whether delivery by caesarean might have impacted on the matter. I am satisfied, on the basis of Professor Winyard's responses, that the question of whether Baby L might have been born by caesarean section does not in this case bear on the question of whether the child was "capable of being born alive".

[62] Regarding the central issue to be determined, on the basis of the evidence, I am satisfied on the balance of probabilities that Baby L was not "capable of being born alive" as per the legal definition and I make a finding to that effect.

[63] Dr Harper said that she did not think that the child would be able to take a first breath and that the accumulation of factors in the case rendered it "virtually impossible" that the child was capable of being born alive. Dr Thornton, having regard to what she described as the "multiple pathologies at work", said that the child was "highly unlikely to have been born alive". Dr Craig contrasted the legal definition with the clinical approach, which focused on the presence or otherwise of heartbeat. He did not rule out the possibility of the child being born with a heart rate and making breathing effort, but he said that the likelihood of the child being born alive was "very small".

[64] It should be emphasised that the witnesses were fully apprised of what is meant by "capable of being born alive" as per the legal definition, namely that the child be capable of existing as a live child, breathing and living by reason of its

breathing through its own lungs alone, without deriving any of its living, or power of living, by or through any connection with its mother. They were all specifically asked to address their mind to that issue when giving their evidence.

[65] In reaching my finding I was particularly struck by the clarity and persuasiveness of the independent expert Professor Winyard's evidence. He maintained that Baby L was not capable of being born alive. He drew an analogy with a life support machine: it was, he said, almost as though the child was connected when in the womb because of the umbilical cord, but when that support was cut off the child would die. He said that the size of the child's lungs rendered effective breathing impossible. He suspected that the baby would in fact gasp, but said that did not equate to effective breathing. He accepted that the child could technically engage in a "gaseous exchange", but that this did not constitute "maintaining life … breathing and living by reason of breathing alone". In his opinion, the amount of air and gas exchange that would take place would be insufficient to support life; the child was incapable of supporting life independently of its mother. As I have indicated, I was not invited to receive independent expert evidence from any other witness in respect of the matter.

[66] Considering this evidence with reference to the established legal test, I am satisfied on the balance of probabilities that Baby L was not capable of being born alive. It follows that the Coroner does not have jurisdiction to conduct an inquest in this case.

[67] At paragraph [15] above, I advised that I would return to the cause of death as recorded in the post-mortem report. Dr Thornton indicated in her evidence that she believed that "intrauterine infection" should be added at Part II of the findings in the post-mortem report, which allows for "other significant conditions, contributing to the death but not related to the disease or condition causing it" to be recorded. At the conclusion of the hearing, I asked whether the next of kin would have any issue with the addition of that text to the report. No issue has been raised in respect of the matter. I propose therefore to invite Dr Thornton to add "intrauterine infection" at Part II of the findings in the post-mortem report.

[68] At the conclusion of the oral hearing, I asked the properly interested persons to address their minds to the question of whether or not an inquest would now serve a useful purpose. Given my finding that Baby L was not capable of being born alive, I do not have jurisdiction to hold an inquest and thus I do not intend to address that question.