Neutral Citation Number: [2013] EWHC 1654 (Admin)

Case No: CO/10424/2012

IN THE HIGH COURT OF JUSTICE
QUEEN'S BENCH DIVISION
ADMINISTRATIVE COURT

Birmingham Civil Justice Centre
33 Bull Street
Birmingham B4 6DS

Date: 19/06/2013

Before :

MR JUSTICE KENNETH PARKER

- -

Between :

R(on the application of) JOHN DUFFY	**Claimant**
- and -	
HER MAJESTY'S DEPUTY CORONER FOR THE COUNTY OF WORCESTERSHIRE	**Defendant**
-and-	
WORCESTERSHIRE ACUTE HOSPITALS TRUST	**Interested Party**

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- -

Mr James Dixon of counsel for the **Claimant**
The Defendant in person

Hearing date: 17 May 2013

- -

Approved Judgment

Mr Justice Kenneth Parker :

1. The Claimant, John Duffy, is the father of Thomas Duffy. Thomas was born on 21 January 2010 and died on 19 March 2011, aged 14 months. An inquest into the death of Thomas was held on 25 and 26 June 2012. The deputy coroner at the conclusion of the inquest entered a verdict of death by natural causes. In this judicial review the Claimant challenges "the sufficiency of the inquiry [at the inquest] and the safety of the verdict". The Defendant is HM Deputy Coroner of Worcestershire, and the Interested Party is Worcestershire Acute Hospitals Trust. Neither the Defendant nor

the Interested Party filed substantial grounds of defence to the claim. The Defendant appeared in person at the hearing but made no substantive submissions. The Interested Party had a representative present at the hearing in a note-taking capacity.

Background

2. On 19 March 2011 Mr and Mrs Duffy, the parents of Thomas, took him to the Accident and Emergency Department at the Alexandra Hospital, Redditch, arriving at 2.37am. He had been unwell in the preceding weeks with what appeared to be bronchial problems and had been seen by a number of different doctors at the family surgery. On admission to hospital the triage assessment was "2" which indicated that he needed urgent review. He was given a Salbutamol nebuliser at 2.45am and 2.53am. At 2.56am he was given 250 micrograms of "atrovent" by means of nebuliser. His temperature was 34 degrees, his oxygen saturations were 90, his respiratory rate was 40 and his heart rate was 150. A chest x-ray was taken upon his admission.

3. Thomas was seen urgently by Dr Southall at 3am who noted a history that he suffered from recurrent chest infections which had deteriorated since Christmas. He had become much worse since 11pm the previous day. The plan was to give him salbutamol nebulisers and warm blankets. The paediatric registrar was contacted for the purposes of an urgent review.

4. An unsuccessful attempt was made to cannulate Thomas by Dr Southall and the Accident and Emergency registrar, Dr Majeed. He was given a further 2.5mg of salbutamol at 3.07am and 3.25am. He was then seen by Dr Natarajan, the Locum Paediatric Registrar at 3.30am who noted the same history and recent deterioration. Thomas was noted to be in respiratory distress. Dr Natarajan's view was that he had a viral induced wheeze. She considered that he should be admitted and given hourly salbutamol nebulisers. It seems that Dr Natarajan did have sight of the x-ray and she subsequently noted that this indicated prominent bronchovascular markings. She made no comment as to the size of the cardiac silhouette which was apparent on the x-ray. Dr Elliott Shinebourne, Consultant Paediatric Cardiologist, subsequently appointed by the Coroner's Court, said at the Inquest on 25 June 2012 that he would have expected a reasonably competent paediatrician to have noted and acted upon the x-ray as it showed a clearly enlarged heart.

5. At 3.45am Thomas was admitted onto a ward (Ward 1). There were attempts to obtain vascular access because he was peripherally cold with poor perfusion. At 4am and 4.10am Thomas' blood pressure was recorded as being unobtainable.

6. Vascular access was eventually achieved at 4.30am and Thomas was given 0.9% saline fluid due to what was presumed volume depletion and also given intravenous antibiotics for presumed sepsis. He was also given intravenous dextrose solution as his blood sugar measurements were very low.

7. At 5.15am, he was reviewed again by Dr Natarajan who contacted the on-call Paediatric Consultant, Dr El-Azzabi. Dr El-Azzabi did not come into the hospital to examine Thomas for himself. By now Thomas had significant metabolic acidosis (build up of acid due to low cardiac output). Dr El-Azzabi directed a repeat bolus of dextrose to be given. Thomas was given further fluid boluses as it was believed that

he had sepsis. His capillary blood gas, however, showed a worsening metabolic acidosis, notwithstanding the fluid that was being administered.

8. Dr Natarjan stated in her statement prepared for the inquest that she was very concerned, especially when she did the blood gas (which the notes reveal was at 5.47am). She asked Dr El-Azzabi to attend the hospital to examine Thomas. Dr El-Azzabi refused. She stated that she was hesitant to insist that he come to examine Thomas.

9. On 19 March 2011, Thomas weighed 10kg. The medical records show that between 4.15am and just after 7.05am he received a total of 3 litres and 166mls of fluid (combination of IV and bolas doses). The current BNF Guidelines for Children (which also pertained at the time of Thomas' death) state that the 24 hour requirement for children over 10 months weighing 10-20kg is 100mls per kg.

10. Although at 7.40am it was considered that Thomas' perfusion had improved, he suffered a cardio-respiratory arrest at 8.10am. The consultant Dr El-Azzabi did attend the hospital when told about the arrest. Unsuccessful attempts were made to resuscitate him and he was pronounced dead at 9am.

The Inquest

11. The inquest began on 25 June 2012. The inquest had been set down for six days and a considerable number of witnesses had been scheduled to give evidence, including the consultant, Dr El-Azzabi and the registrar, Dr Natarajan.

12. In the event the deputy coroner heard only two witnesses, Dr Hargitai, the pathologist and Dr Shinebourne (the coroner-appointed expert), who had been consultant paediatric cardiologist at the Royal Brompton Hospital from 1971 to December 2007. Dr Shinebourne's evidence was crucial to the verdict.

13. Dr Shinebourne stated that those treating Thomas had failed to recognise that he had a heart condition. In his opinion the first point at which it might be reasonably thought that Thomas had a heart problem was when the x-ray was seen. The x-ray showed unequivocal enlargement of the heart shadow. There was clearly an enlarged heart. An ECG could have examined the activity and structure of the heart. Inotrope drugs could possibly have been applied in order to support/improve the heart. Thomas had metabolic acidosis (excessive acid caused by cardiac, as opposed to respiratory, issues). The acidosis was severe and should have prompted a look at the heart. A relevant question to have asked would have been "Why is Thomas hypothermic?" to which the answer would have been "low cardiac output" (poor heart function).

14. Dr Shinebourne was asked whether it was a reasonable assumption that Thomas' condition was due to an infection. He replied that given the acuteness of the deterioration it was likely that the heart was the primary cause. He agreed that he had identified a number of failings in Thomas' care.

15. Asked whether there were any failings that one could characterise as "gross", he said:

> "It's difficult, it's a failure. I'm not sure I would say gross. It's not as if the people were walking away and not trying to treat

> him. They've made a diagnosis, the diagnosis may have been largely incorrect but it was not totally illogical. But I think it was poor practice not to have corrected the metabolic acidosis. It's difficult to defend that."

16. Dr Shinebourne said that he did not know whether correcting the acidosis and inotropic support to the function of the heart would have prevented the cardiac arrest. He says that on the balance of probability he was clearly at risk and would have remained at risk. The only definitive treatment would be transplant. As to the latter he says that there were myriad factors as to whether that would have taken place.

17. Dr Shinebourne posed the question of whether the failure to correct the metabolic acidosis and the failure to use inotropic drugs contributed to Thomas' death. He said that he would find that impossible to weigh up. He did not know. He was asked whether either of those interventions might have caused Thomas to survive or prolonged his life and he said that they might but that he would struggle with the probability.

18. Dr Punt, on behalf of Mr and Mrs Duffy, asked about the fluids that were administered. In the investigation report dated 19 March 2011, Dr Andrew Short had drawn attention to the issue of fluids, and had said under "Contributory Factors":

> "The possibility of an underlying cardiac problem was not considered in the initial differential diagnosis <u>leading to interventions with repeated bolus intravenous fluids which could have contributed to his cardiac failure.</u>" (My emphasis)

19. The manner in which Dr Shinebourne dealt with the issue of fluids should be set out in full from the transcript.

> "**Dr Punt**: I'm just going to ask you a bit more about fluid input. If I could ask you to turn to page 14 in the Court bundle? I'm taking you to the penultimate series of boxes where it says weight, estimated 10 kilograms. Now what effect in a child of 14 months does the estimated or actual weight have on the amount of fluid that a child is given in any particular period of time?
>
> **Dr Shinebourne**: Well it definitely affects it. But I hasten to add it's a long time since I was calculating intravenous requirements for young babies.
>
> **Dr Punt**: Again, if anything is outside your expertise at this particular stage in your career just say so and we'll move on. But as a general principle does the weight have an impact on fluid intake?
>
> **Dr Shinebourne**: Oh yes.

> **Dr Punt**: If somebody, a child was say suspected of having a heart problem, are there any particular precautions that would be taken with regards to fluid intake?
>
> **Dr Shinebourne**: Well, it works both ways. You wouldn't want them under hydrated and you wouldn't want them over hydrated. If their volume is too little then they have a [inaudible] output. If you give them too much they go into congested heart failure, so it needs to be correctly calculated.
>
> **Dr Punt**: So would it be this position and tell me if I'm wrong, would it be this position if somebody's got a normally functioning heart, they've got a fair amount of leeway. But if they've got a malfunctioning heart, a malfunctioning heart muscle for any reason you've just got to be that much more careful with it.
>
> **Dr Shinebourne**: In general, yes.
>
> **Dr Punt**: The weight is a guide to that?
>
> **Dr Shinebourne**: It is.
>
> **Dr Punt**: Can I just invite you now to look at pages 37, 38 and 39? Now, if we look at those. If we start on page 39, I'm just going to ask you to add up, if you can, the – you may need to take a minute or more to do this. Have a look at those three sheets and give the court your conclusion as to how much intravenous fluid was given between 0450 and 0750. You may need a few minutes to do that.
>
> **Dr Shinebourne**: There [presumably "It"] would also be wrong [inaudible, but possibly "to go"] into question on volume. Because I just don't, you know I haven't looked after children at that level for a long time.
>
> **Dr Punt**: Oh then if you're not going to be able to answer … I think what you're saying is you wouldn't be able to advise the court on whether an appropriate or inappropriate amount of [presumably "fluid"] was given?
>
> **Dr Shinebourne**: Correct."

20. In answer to questions on behalf of the Interested Party, Dr Shinebourne stated that he had been out of intensive care practice as regards children for 15 years.

21. Dr Punt concluded his questioning by probing into the issues of causation and possible neglect in this case, as follows:

> "**Dr Punt**: You've been asked by the Coroner to indicate what the outcome might have been and you've indicated that it was difficult and you've expressed yourself in terms of may. Just

> so that we're absolutely clear, I'm going to ask you the question this way. On a balance of probabilities by which I mean more likely than not, even 51%/49% if Thomas received inotropes, if the acidosis had been dealt with before he arrested, on a balance of probabilities what would've been the outcome within this illness episode?
>
> **Dr Shinebourne**: I don't know …
>
> **Dr Punt**: It's a question I wouldn't usually ask but the Coroner's asked it so that's why I'm asking you. In the context of coronary law, gross means very serious. So I'll ask you this. The failure the Coroner asked you about or any of the failures you identified are very serious failures?
>
> **Dr Shinebourne**: I think not to correct the metabolic acidosis was a serious failure of management.
>
> **Dr Punt**: The failure to identify the large heart on the chest raiograph?
>
> **Dr Shinebourne**: I think a little bit depends on who's looking at the chest x-ray. I mean the heart obviously is being on the chest x-ray so it was missed.
>
> **Dr Punt**: What at Registrar level?
>
> **Dr Shinebourne**: I would expect them to have picked that up yes.
>
> **Dr Punt**: So not to pick it up would be a very serious error?
>
> **Dr Shinebourne**: You're pushing me into saying something. I think it was an error."

22. Mr Murray asked some questions on behalf of Dr Natarajan, including in particular:

> "Am I right to understand that that means that if metabolic acidosis had been corrected and an inotropic agent introduced at an earlier stage, for example following the first blood gas results, you can't say on the balance of probabilities that would have resulted in any other outcome than that which occurred?"

Dr Shinebourne said that was correct.

23. At the close of the evidence of Dr Shinebourne the Deputy Coroner indicated that it might be possible to dispose of the inquest without hearing further evidence. Dr Punt sought a short adjournment so as to consult with Mr and Mrs Duffy. Following that consultation, he made an application to the Deputy Coroner that she ought to adjourn in order to instruct an expert with current experience and knowledge.

24. He referred to the fact that Dr Shinebourne had not dealt with acutely ill cardiac infants for a substantial period of time. That was a reference to the evidence that he had been out of that area of practice for some 15 years. Dr Punt also submitted that Dr Shinebourne had been unable to assist as to the balance of probabilities as to inotropes and the acidosis. Dr Punt submitted:

> "When it involves a matter of an area of practice where the expert hasn't practised himself for a number of years, it would be my submission that it would be a matter of serious concern, possibly even dangerous concern, if the matter was just allowed to rest there.
>
> There was a third area of critical care, mainly fluids, in which he took us so far, by acknowledging that in the circumstances, it could well be critical. But through his lack of current practice, he was unable to actually answer the question.
>
> In all the circumstances, ma'am, it would be my reluctant submission, because of the consequences for all concerned, to submit that it would be dangerous to conclude on the present evidence, lest would be a suggestion that the inquiry be insufficient. The preferred course would be adjourn while you seek an opinion in the field of paediatric intensive care, critical care medicine, possibly or even complemented by a paediatric cardiologist who was in practice at the material time."

25. The deputy coroner indicated that she was only going to base her decision on the evidence and not on considerations of shortening the inquest. Mr Murray stressed that he made no positive submission either way as to the adjournment but drew attention to features of the evidence. Mr Partridge also drew attention to certain features of the evidence. He referred to part of Dr Shinebourne's evidence that he saw nothing inappropriate in the fluids administered at one stage and that at that stage they appeared to have a positive effect. In relation to the point about Dr Shinebourne's current practice and expertise he appears to have misquoted the evidence, referring to his having been out of practice for "two years or so".

26. The deputy coroner, having heard submissions from Ms Murray and Mr Partridge, then adjourned her decision until the following day.

27. The deputy coroner refused the adjournment and gave her reasons by reference to the points in Dr Punt's submissions, as follows:

> "Firstly, the lack of experience. Dr Shinebourne told us that he gave up practice, retired as a cardiologist, in 2011, and, although he had not been on a children's ward for some little time before that, I am satisfied that he does have current relevant experience and I accept the submissions of Mr Murray and Mr Partridge on that point, and note that in Mr Partridge's submission I was reminded that it was not suggested in questioning to Dr Shinebourne that his being out of practice for two years or so undermined him.

> Secondly, that he did not answer questions about inotropes, metabolic acidosis and fluids, that is whether he was able to assist on the balance of probabilities as to the outcome if management of inotropes and management of metabolic acidosis had been attended to, and whether he could answer questions about fluids being given to Thomas.
>
> I have received his evidence in relation to these matters and in relation to the inotropic treatment and metabolic acidosis he said when it was put to him "if metabolic acidosis were corrected and inotropes were given, you can't say on the balance of probabilities if this would have resulted in any other outcome than that which occurred, that is death?", and he confirmed not.
>
> In response to questions about fluids he said he didn't see anything inappropriate in the treatment. In fact he said that the child responded to boluses of fluid and that that had a positive effect.
>
> It is clear to me, therefore, that, in fact, Dr Shinebourne did answer the critical questions in full and he was pressed about those matters.
>
> It, therefore, follows that Dr Punt's submissions are, in my view, without foundation."

28. The deputy coroner then turned her mind to the application of Rule 36 of the Coroners' Rules 1984. She stated her conclusion as follows:

> "His [that is, Dr Shinebourne's] response to Mr Murray and his reply to me were confirmatory in terms that this little child could have died at any time. What all that evidence means is that the other matters weighing upon the family are not relevant to the purposes of Rule 36 and are, therefore, beyond the scope of an inquest. Dr Shinebourne's evidence to me was clear. This child could have died at any time and in the light of that everything else falls away ….
>
> The time and place and circumstances at or in which injury was sustained are that Master Duffy became unwell and was admitted to hospital where he died.
>
> My conclusion, as the coroner, as to death is that Thomas Francis Duffy died as the result of natural causes."

29. That was the end of the inquest. No further evidence was heard. In particular the consultant, Dr El-Azzabi, and the registrar, Dr Natarajan, were not called upon to give an account of what had happened to Thomas Duffy.

The Grounds of Challenge

30. Mr James Dixon, in his admirably succinct submissions on behalf of the Claimant, submits that the decision of the deputy coroner not to adjourn, and then to proceed as she did, was fundamentally flawed. I see force in each of the points made by Mr Dixon, and set out my decision below in the light of his contentions.

Decision

31. It is well established that this Court on judicial review would interfere with the decision of a coroner on a matter such as adjournment only if the decision was wrong in principle, or was a decision that had no reasonable basis in the circumstances that had arisen. Successful challenges to such decisions are, therefore, rare.

32. However, for a number of reasons this was an unusual case. First, there was material obtained before the inquest and there was expert evidence heard at the inquest that raised very serious questions indeed about the level of hospital medical care that Thomas had received, particularly from the consultant, Dr El-Azzabi (who, though requested, had declined to come to the hospital) and from the registrar, Dr Natarajan, who, on the testimony of Dr Shinebourne, had in more than one respect fallen well short of the skill and competence that could reasonably have been expected. Dr Shinebourne could not be pressed to express an opinion about the precise level of clinical failure, but his answers, set out above, left that issue open to objective judgment by the deputy coroner.

33. Second, the position of Dr Shinebourne gave rise, in my view, to real concern. He had told the inquest that he had not been concerned with intensive care of children for 15 years. It was the nature of the intensive care of Thomas that lay at the heart of the immediate circumstances leading to his death. The deputy coroner, in her ruling on the adjournment, by stating that Dr Shinebourne had not been on a children's ward for "some little time", was failing to give due weight to the fact that he had not been involved in intensive care for a very substantial period. His "current experience", therefore, was lacking in an important respect.

34. Third, the second point above became crucial as the issue of causation was developed. It is plain from the evidence referred to above that Dr Shinebourne did not regard the issue of causation as straightforward. Thomas, in his opinion, might have survived if he had received competent and proper treatment, but Dr Shinebourne could not go as far as saying that Thomas would (on a balance of probability) have survived. This issue of the balance of probability, therefore, called for a very fine judgment, in which all material factors had to be properly taken into account and assessed. Dr Shinebourne's current lack of experience in the intensive care of children raised a question about the extent of his expertise and about the strength of his conclusion on causation.

35. Fourth, in my judgment, that question became decisive when Dr Shinebourne gave his evidence in regard to fluids. That issue had already been identified as a contributory cause in the hospital investigation (see paragraph 18 above). Dr Shinebourne accepted that "if you give them [small infants] too much [fluid], they go into congested heart failure, so it needs to be correctly calculated" (see paragraph 19 above, my emphasis). In her ruling on adjournment, the deputy coroner said that Dr

Shinebourne "didn't see anything inappropriate in the treatment – in fact he said that the child responded to boluses of fluid and that that had a positive effect". In my view, that was not an accurate or complete representation of Dr Shinebourne's evidence in regard to the fluids administered to Thomas. Dr Shinebourne had in fact emphasised the need for careful and measured management of fluid intake in a case such as Thomas', and had opened up the possibility (which could not then be fully explored with him) that inappropriate fluid management contributed to death. But, even more importantly, Dr Shinebourne had simply been unable to deal with the questions put by Dr Punt about the appropriate level of fluids to be administered to an infant of Thomas' age and weight. This was simply not satisfactory. Fluid intake had already been identified as a contributory cause of Thomas' death. But the expert, upon whose fine judgment the deputy coroner intended to rely on the issue of causation, had not been able to deal fully and adequately with that aspect. This raised a very real doubt – to put the matter at its lowest – whether that very fine expert judgment was sufficiently informed by a full understanding, and comprehensive assessment of, all the factors that had a significant bearing on causation.

36. In my view, the foregoing combination of circumstances pointed to only one conclusion, namely, that the inquest should be adjourned and evidence should be obtained from an expert with current experience in the intensive care of children who could also deal with all relevant questions as to (a) the likely extent to which Thomas' fluid intake contributed to his cardiac arrest and (b) whether the intake of fluid materially affected the judgment about causation. In reaching her decision on adjournment, the deputy coroner made certain specific material errors (identified above). She also reached a conclusion which, on the balance of relevant factors, was not reasonably open and was at real risk of causing substantial injustice.

37. For this claim the Claimant filed an expert medical report by Dr B Tsai-Goodman MD, FRCP (UK), consultant paediatric cardiologist at Bristol Congenital Heart Centre, Bristol Children's Hospital. No application was made, or permission granted, for the admission of this report. Plainly an application should have been made. The report was served on the Interested Party and the deputy coroner. I should make it clear that my conclusions in this judgment do not rely at all on anything contained in the report. I simply note that Dr B Tsai-Goodman does have current (and impressive) relevant experience and that, in her opinion, "large and repeated fluid boluses should have been avoided as this would cause worsening heart failure, cardiac decompensation and death". In her conclusion she stated what she believes would have happened if a correct diagnosis had been made at the earliest opportunity:

> "… Furthermore, he [Thomas] would have been started on inotropes (and diuretics) and an urgent referral to the closest paediatric centre would have been made. It is more likely than not that, with appropriate supportive measures and cautious fluid management, Thomas would have survived that evening." (My emphasis)

38. I acknowledge that if an adjournment had been allowed, it would have had consequences for the planned course of the inquest. The witnesses had been scheduled to attend and to give evidence; arrangements would have to have been made for their future attendance, no doubting both causing inconvenience to them and delaying the conclusion of proceedings. However, for the reasons already given, the

interests of justice required an adjournment, notwithstanding these regrettable consequences.

39. In these circumstances, it seems to me that there was a material procedural irregularity, the verdict cannot stand and must be quashed. A fresh inquest needs to be held.

40. I should add that Mr Dixon had a broader ground upon which he sought to challenge the procedure in this case. He accepted that the duty to inquire under Section 8 of the Coroners Act 1988 is limited by Section 11(5)(b) and Rule 36 of the 1984 Rules, and he acknowledged that, although the inquiry is almost bound to stretch wider than strictly required for the purposes of a verdict, the judgment of how much wider is pre-eminently a matter for the coroner.

41. However, he relied, in particular, on *R(on the application of Takousis) v HM Coroner for Inner North London* [2006] 1 WLR 461 for the proposition that the scope of the inquest should not necessarily be limited to causative matters, that is, whether any putative neglect had a "clear and direct causal connection" between such conduct and the cause of death (*R v North Humberside Coroner ex p Jamieson* [1995] QB 1 [1994] 3 WLR 82). The function of an inquest is to seek out and record as many of the facts concerning the death as the public interest requires (see *R v South London Coroner ex p Thompson* [1982] 126 SJ 625). In this case, he argued, there was material before the deputy coroner upon which a finding of neglect, particularly on the part of the consultant and registrar, could not be ruled out. Even on the evidence of Dr Shinebourne, the failure in the medical treatment of Thomas might have caused his death, although Dr Shinebourne believed that, on a balance of probability, Thomas would have died in any event. In those circumstances it was incumbent, as a matter of public interest, on the deputy coroner to inquire further into the nature of the treatment, hearing the evidence of Dr El-Azzabi and Dr Natarajan, as had originally been contemplated, and into the extent to which such treatment might have contributed to Thomas' death. Furthermore, Mr Dixon contended, there was evidence before the deputy coroner of possible significant systemic failure, namely, the refusal of the on duty consultant to attend the hospital when the registrar, who was treating Thomas and was extremely anxious about his deteriorating condition, had requested the presence and direct involvement of the senior physician. Again the public interest, he urged, required a broader inquiry than that in the end adopted by the deputy coroner.

42. I see very great force in these further submissions. However, in the light of my earlier decision as to the adjournment, I do not believe that it is necessary to reach a definitive view on this wider ground.