



Assistant Coroner for Liverpool & the Wirral

INQUEST INTO THE DEATH OF
JENNIFER ANN SMITH

JUDGEMENT

Introduction

1. Mrs Jennifer Smith was initially admitted on the 3rd of December 2014 to the Walton Centre. She was transferred to the centre from Arrow Park Hospital.
2. Seven days previously Mrs Smith began developing significant headaches and encountering progressive confusion. When she was admitted to the Walton Centre she had a Glasgow Coma Score of 14 and imaging had shown a subarachnoid haemorrhage with early hydrocephalus.
3. She was investigated and found to have a left posterior communicating artery aneurysm and left internal carotid artery aneurysms. She deteriorated and the decision was made to continue with treatment and the aneurysm was coiled.
4. Thereafter Mrs Smith had a number of problems including vasospasm leading on to cerebral infarction, and a CSF infection that eventually cleared allowing a shunt to be placed.
5. Following treatment Mrs Smith had a tracheostomy and was suffering with a right-sided hemiparesis. She was, however, opening her eyes spontaneously; could obey simple commands; appeared to have mood changes so could express both happiness when her family visited and irritation at her situation.
6. There was an attempt to wean Mrs Smith from the tracheostomy but this caused respiratory distress.
7. She was clinically stable but it was unclear at this stage whether she would recover significantly more function than she had done at that stage. She was assessed by the rehabilitation team who felt that she was not appropriate for rehabilitation immediately.
8. Mrs Smith was transferred back to Arrow Park with a plan to care for her and see if she got better and to then proceed on to rehabilitation as appropriate.
9. Mrs Smith was placed on ward 36, which was one of the cohort wards at Arrow Park for tracheostomy patients.



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10. Mrs Smith was at this stage totally reliant on nurses and other medical staff for all her needs. She was confused about her situation and could not speak.
11. The transfer to Arrow Park occurred on Friday the 6th of March 2015. In the early hours of the morning an emergency response team was called to Mrs Smith's bedside. She unfortunately died on the morning of the 7th of March 2015.

Duty of the Coroner

12. My duty is to find the facts and form a conclusion from the evidence and this duty must transcend any feelings of sympathy or indeed disapproval for particular individuals or organisations. I have to reach a conclusion even if that conclusion seems to be unkind or may appear critical or some person or persons or organisations.
13. This is not a trial; it is an inquest into a death, a fact-finding inquiry to find out how Jennifer Smith died. It is not concerned with attributing blame. It is simply a way of establishing facts.
14. In order for me to decide the facts, I must make an assessment of the evidence. It is up to me what I make of each witness, in terms of their credibility and reliability. It is of course open to me to accept one part and reject another part of a witness's testimony.
15. Where there are conflicts within the evidence if the evidence about which there is controversy is relevant to my conclusion then I must decide which evidence I accept and which I reject. This does not mean that I must resolve every area of dispute if the disputed facts are not relevant to establishing who the deceased was, where they died, when they died and how.
16. Whilst it is up to me what I accept or reject I cannot speculate or guess. Speculating amounts to no more than guessing, or making up theories without good evidence to support them. In this case I must be satisfied that a particular piece of evidence is true and relevant to the cause of death.



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17. Consequently there may be a number of possibilities as to the mechanisms of death but I must focus on those that can be said on the balance of probabilities to have contributed more than minimally to the death.
18. The evidence has been directed towards answering four questions. **Who** was the deceased? **When, where** and **how** did Mrs Smith come by her death? I must not express an opinion about other matters.
19. At the start of the inquest I explained that I would be making findings about the central or core issues at the heart of the case. We have covered a wide range of issues and had to look at some of the investigative processes. An inquest like this is often described as akin to a funnel. At the start it is very wide but as you come to the end of the case it narrows down to that which you have to make findings about. It is my public duty to ensure that the full circumstances are investigated.
20. I appreciate that this can be difficult for a grieving family who have wider concerns and honestly held views about the facts, the evidence, and the people involved in the case. In some cases the inquest itself with its wide-ranging inquisition into the circumstances of an individual's death can bring into the light a number of matters that might otherwise have been swept away.
21. I hope that this has been one of those cases, and that the fact of the inquest has given everyone involved the opportunity to reflect on Mrs Smith's death.

The Record of Inquest

22. Once I have made my findings in relation to the facts, which relate to the death. I must record these and sign one copy of the Record of Inquest. You have copies of this form in front of you and I complete all the sections.

Section (Box) 5

23. I shall deal with this first. These are the details, which are required for the death to be formally registered. In this case there is no dispute about them and they were given to the court by Mrs Redgrift, Mrs Smith's daughter, in her evidence

Section (Box) 1



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24. Again I can simply enter Jennifer Ann Smith

Section (Box) 2

25. I am required to determine the medical cause of death. You will recall from the evidence of the pathologist that the correct format for recording this is to show the disease or condition directly leading to death i.e. the immediate cause of death, under 1(a), with underlying conditions in sequence under 1(b) and 1(c).

Section (Box) 3

26. This is where I will record when, where and how the deceased came by her death.

27. It will be brief, neutral and factual, expressing no judgment or opinion, without naming individuals. Restricted to answering the three key questions: when, where and how did she come by her death.

28. I will only consider factual findings on relevant issues specific to this case, about which we have heard evidence namely those matters, which in my judgement are relevant to the cause of the death.

29. Something can be properly described as a cause of the death provided it contributes to the death more than minimally, trivially or negligibly. It does not have to be the sole or predominant cause; as long as I find it made more than a minimal contribution, it is a cause of the death.

Section (Box) 4

30. Finally I must draw some conclusion about Mrs Smith's death.

31. I cannot not include anything about which I am not satisfied, on the balance of probabilities formed part of the circumstances that led to Mrs Smith's death.



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32. Section 10 (2) of the Coroners and Justice Act 2009 provides that no conclusion shall be framed in such a way as to appear to determine any question of (a) criminal liability on the part of a named person or (b) civil liability.

Relevant Facts

33. Mrs Smith was accepted into the Walton Centre following an initial admission into Arrow Park.
34. Mrs Smith had suffered left posterior communicating artery aneurysm and left internal carotid artery aneurysms. She deteriorated and the decision was made to continue with treatment and the aneurysm was coiled.
35. Thereafter Mrs Smith had a number of problems including vasospasm leading on to cerebral infarction, a CSF infection that eventually cleared allowing a shunt to be placed.
36. Following treatment for these difficulties Mrs Smith was given a tracheostomy to ensure that she continued to breathe. At this stage following treatment Mrs Smith was unable to care for herself at all. She appeared unaware of her condition, was unable to talk and had very little movement. It is unclear what level of functioning Mrs Smith could have eventually returned to.
37. She was, however medically stable. There had been some improvements following the initial treatment and Mrs Smith was opening her eyes spontaneously, could obey simple commands appeared to have mood changes so could express both happiness when her family visited and irritation at her situation.
38. A decision was taken to repatriate Mrs Smith to Arrow Park hospital.
39. It was clear from all the evidence that the clinical plan was to transfer Mrs Smith for on-going care with a view to rehabilitation when and if that became possible.
40. The transfer took place on the afternoon of Friday the 6th of March 2015.
41. The transfer of patients with complex care needs on a Friday was not desirable because senior cover over the weekend was limited.
42. Given this difficulty the handover was of significant importance to be able to understand the particular needs of Mrs Smith.



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43. The handover was from Nurse Wilson who is a specialist outreach nurse with considerable knowledge and experience of tracheostomy patients to Nurse Ryan who was general nurse who had less familiarity with tracheostomy patients having assisted with the treatment of such a patient some two months previously.
44. There is some ambiguity in the evidence as to whether this was, as Mr Wilson says this was, a fairly comprehensive oral handover with a brief discussion with an unnamed outreach nurse or whether it was a short oral handover to nurse Ryan with no interaction with the outreach team.
45. It is apparent that whatever occurred at the handover there was an inadequate level of interaction between the Walton Centre and Arrow Park.
46. There was no evidence that Arrow Park had appreciated that Mrs Smith had been on a DoLs and despite there having been a mitt for her restraint in with her medicine there were no questions asked about this item. There was no evidence that the nature of the supervision of Mrs Smith had been fully discussed, whether she needed 1:1 care and in what form that would take.
47. The Root Cause Analysis prepared in respect of Mrs Smith's death found that there had been difficulties in the hand over and the level of care required.
48. There was no evidence that any nurse at Arrow Park considered the written handover notes prepared for them by the Walton Centre.
49. Those notes contained amongst other things a description of the tracheostomy tube, which was incorrectly identified at Arrow Park; a plan for four hourly inspection of the inner tube of the tracheostomy and a tracheostomy care monitoring chart setting out regular checks and suctioning of the tracheostomy.
50. It is clear from the evidence that mucus secretions can build up in a tracheostomy patient and without suctioning these secretions can cause difficulties, blocking or partially blocking the airway.
51. This handover led to difficulties in the continued care for Mrs Smith as it was not clear what was expected of the nurses caring for Mrs Smith. It was clear from the evidence of Nurse Jones that she envisaged actual checks on secretions from the tracheostomy every two hours when other observations were carried out. In reality her view was that as the nurse was always in the vicinity, or other patients were in the vicinity the distinctive sound that is



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associated with difficulties in breathing by a tracheostomy patient would mean that if there was a problem it could be swiftly rectified.

52. There is evidence that no suctioning was carried out on the tracheotomy of Mrs Smith from 17:15 when it was carried out by Nurse Jones until after 0300 when it was carried out by Nurse Fletcher, after Mrs Smith was already in difficulties.
53. There is no evidence that the inner tube was checked at the four hourly intervals suggested by the handover notes.
54. Dr Gascoigne gave evidence that the level of tracheostomy care was in his opinion inadequate.
55. The nurses caring for Mrs Smith continued to carry out observations on Mrs Smith regularly and at 0045 Mrs Smith's oxygen saturation levels were normal. The court heard evidence that the nurses caring for Mrs Smith therefore did not perceive that there was a difficulty. Dr Gascoigne gave evidence that this reading is not significant and it is clearly the case, as underlined by Dr Lockyer that mucus build up could block airways totally or partially so it must follow that in any initial stage of mucus build up there might be no difficulty.
56. The "normal" readings, however do indicate that Mrs Smith's lung function was not slowly declining as might be seen if she had been suffering from ventilator associated lung injury.
57. Shortly before 0300 in the morning Mrs Smith was struggling with her breathing and there was a rapid decline in her ability to oxygenate herself. Both Dr Lockyer and Dr Gascoigne have given evidence that this demonstrates that some sort of acute event had occurred at this stage causing Mrs Smith's rapid decline.
58. What followed was an appropriate attempt at emergency assistance to Mrs Smith to try and save her life.
59. I note that Mr Fletcher gave evidence that as part of that emergency response he carried out suctioning of the trachea to remove mucus. He found no mucus. Dr Gascoigne made clear that given the presence of mucus on post-mortem examination and the location of that mucus whatever attempt had been made to suction had been unsuccessful, possibly because the nurse had not inserted the catheter to the appropriate depth.



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60. Whilst there was some confusion as to whether Mrs Smith should be transferred to ITU and Mrs Redgrift gave evidence that she had to effectively cajole the medical staff at Arrow Park to effect such a transfer, the evidence from Dr Gascoigne was that any delay would have had little effect as all appropriate treatment was being given at the bedside in any event. A transfer would have taken time and would not have resulted in significantly different care. On the balance of probabilities I find that there is no evidence to suggest that the emergency response was anything other than medically correct.
61. I understand that the discussion with Dr Mir, who had not fully appreciated the plan for Mrs Smith's care at Arrow Park was a distressing one to Mrs Redgrift and her family but I cannot say that this delay has a relevance to the death.
62. I heard evidence, which I accept that the medical cause of death was respiratory failure. This was on the balance of probabilities contributed to by a combination of pre-existing emphysema and reparative phase acute lung injury. These were two pre-existing conditions that Dr Lockyer found evidence of, but his clear evidence was that these alone were unlikely to have caused difficulties.
63. In considering what the acute event was that preceded Mrs Smith's rapid decline I heard a great deal of evidence from both Dr Lockyer and Dr Gascoigne.
64. There was evidence of audible respiratory difficulties at the time of Mrs Smith's rapid decline. Witnesses described stridor and grunting. This audible distress is indicative of upper airway obstruction, which could have been caused by a displaced tracheostomy tube or mucus secretions forming a partial blockage.
65. Other than the audible difficulties there was no other evidence that the tube had been displaced. There was, to the contrary, evidence that it was still in place at the time of the emergency intervention according to attending medical staff.
66. There was however mucus secretions found in the tracheobronchial tree. I find on the balance of probabilities that this mucus secretion contributed to the death of Mrs Smith.
67. I heard much evidence about the use and presence of mitts on Mrs Smith before she died. The use of mitts was to prevent the displacement by Mrs Smith of her own tracheostomy. The staff at Arrow Park gave clear evidence



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that they did not see a mitt being used. If a mitt had not been used it would have made displacement a greater possibility. Mrs Redgrift gave compelling evidence that a mitt was used throughout and was on Mrs Smith's hand at the time of her death. This would have made displacement of the tracheostomy by Mrs Smith less of a possibility.

68. This is a significant divergence of evidence but given that the presence or otherwise of the mitt goes only to the likelihood of Mrs Smith displacing her own tracheostomy and given the speculative nature of the evidence that there was such a displacement I have not felt it necessary to make a finding of fact as to the use or otherwise of the mitt. The confusion over the use or otherwise of a mitt that was undoubtedly sent with Mrs Smith from the Walton centre is in my view further evidence of a lack of clarity in how Mrs Smith was to be cared for on the ward at Arrow Park hospital.
69. There was evidence of a pulmonary oedema. On the balance of probabilities I find that this contributed to the death but on the evidence of Dr Gascoigne and Dr Lockyer I cannot say that this was the event that caused the sudden decline in Mrs Smith's health.
70. Given these findings I find on the balance of probabilities that there was a causal link between the inadequate handling of the transfer of Mrs Smith onto the ward at Arrow Park, which meant that the care plan for Mrs Smith was not coherently formulated. There was present in Mrs Smith's tracheobronchial tree mucus secretions, which might have been prevented with a different level of tracheostomy care. That mucus combined with other difficulties meant that Mrs Smith suffered a critical respiratory failure.

Conclusions

71. I have decided, that in all the circumstances, given the contributory factor of the use of the tracheostomy in this case it is not one where an expansive answer to Box 3 and a short conclusion of "natural causes" is appropriate. The most appropriate conclusion in my judgement is a narrative one. The record of inquest, it follows can be filled in with the particulars as set out by Mrs Redgrift about her mother. The name can be entered as Jennifer Ann Smith. The medical cause of death in accordance with the evidence on oath of Dr Lockyer, which was different to his post-mortem report will be: ***1a Respiratory Failure, 1b Emphysema, reparative phase acute lung injury, pulmonary oedema and retention of mucoid secretion in the tracheobronchial tree.***



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31. Pursuant to Chief Coroner's Guidance number 17 that in a case where there is to be a narrative conclusion "the better way is to record the mechanism of death under 'how' in Box 3 and the wider narrative conclusion in Box 4. I intend to complete Box 3 in this way:

72. ***"Mrs Jennifer Smith died on the 7th of March 2015 at 0630 in the morning at the Arrow Park hospital, following a period of illness after a subarachnoid haemorrhage which led to her being fitted with a tracheostomy she suffered respiratory failure contributed to by emphysema, reparative phase acute lung injury, pulmonary oedema and retention of mucoïd secretion in the tracheobronchial tree"***

73. Box 4, I intend to complete in this way:

74. ***"Having suffered significant brain injury Mrs Smith was transferred to Arrow Park hospital from the Walton Centre for continued care. The extent of the tracheostomy care and the monitoring of mucoïd secretions in the tracheostomy that was envisaged by the Walton Centre was not appreciated by Arrow Park hospital consequently mucoïd secretions could build up. Mucoïd secretions were found in Mrs Smith's tracheobronchial tree. Mucoïd secretions can create a blockage in a tracheostomy and in this case contributed along with emphysema, reparative phase acute lung injury, pulmonary oedema to the respiratory failure that caused death."***

Report for the Prevention of Future Deaths

75. The law says that if I, in the process of conducting an investigation, become aware of anything that gives rise to a concern that circumstances creating a risk that other deaths will occur, or will continue to exist, in the future and in my opinion action should be taken to prevent the occurrence or continuation of such circumstances, or to eliminate or reduce the risk of death created by such circumstances, I must report the matter to any person who I believe has the power to take such action. I can also write to any person or body drawing to their attention a matter of concern that has arisen during the investigation.

76. I have heard evidence from the NHS trust that measures have been taken to ensure a meaningful dialogue takes place before a transfer of a patient like Mrs Smith takes place.



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77. I have also heard that Arrow Park hospital have consolidated all their tracheostomy patients in one ward thus maximising on the experience of ward staff to deal with patients in Mrs Smith's position.
78. Given these developments and other that I have been given evidence of I do not think that a report to prevent future deaths is appropriate.
79. I praise the hospital for having the courage and the initiative to look at its own procedures in this constructive way.
80. Whilst it can only be scant consolation to a grieving family to know that your mother's death highlighted issues that mean a future similar death could be avoided it is at least one small positive outcome.
81. I thank Mr Allerston, in a case with a number of difficulties encompassing two hospitals, you have served your clients very well.
82. Mrs Redgrift you and your family have my sincerest personal condolences. You have conducted yourself with dignity and the memory of your mother has been well served by your tenacious pursuit of the truth in this inquest. I am sorry that no inquest can answer every one of yours questions and it is not about laying blame but I hope that the process has given you some insight into your mother's death and brought out some of the issues that concerned you.

Joseph W. Hart
Assistant Coroner for Liverpool and the Wirral