REGULATION 28: REPORT TO PREVENT FUTURE DEATHS

This report is made under paragraph 7, Schedule 5, of the Coroners and Justice Act 2009 and regulations 28 and 29 of the Coroners (Investigations) Regulations 2013.

Recipients

This report is being set to:

- Department of Health

Coroner

I am Fiona Borrill, HM Area Coroner for the area of Manchester City.

Coroner's legal powers

I make this report under paragraph 7, Schedule 5, of the Coroners and Justice Act 2009 and regulations 28 and 29 of the Coroners (Investigations) Regulations 2013.

Investigation and Inquest

On 31 March 2014 I commenced an investigation into the death of Amelia Celestine Calvo, aged 1 day. The investigation concluded at the end of the inquest on 11 March 2016.

The cause of death was found to be:

1a Multi organ failure. Disseminated intravascular coagulation
1b Hypovolemic shock
1c Haemorrhage during procedure
2 Trisomy 18

The recorded a Narrative Conclusion: Natural causes contributed to by a minimisation of the risk of loss of intubation by not guarding the endotracheal tube in a ventilated baby and a breakdown in communication between medical staff in theatre on 28 March 2014.

Circumstances of death

The deceased was born at 31 weeks gestation on 27th March 2014 at 20:23 at St Mary's Hospital as a twin delivery weighing 1.15kg. She was subsequently diagnosed with Edwards Syndrome, a life limiting condition. She had poor respiratory effort and was successfully intubated at the fourth attempt at 12 minutes of age. She was transferred to the neonatal intensive care unit and remained ventilated. Cardiac anomalies were diagnosed by ultra sound scan. Chest x-ray revealed that the nasogastric tube looped in a blind ending oesophagus and a diagnosis of oesophageal atresia with tracheo-oesophageal fistula was confirmed. To be treated for this required urgent surgery to ligate the tracheo-oesophageal fistula, and this procedure was listed for the afternoon of 28th March 2014. The deceased was safely transferred to theatre at the Royal Manchester Children's Hospital at 13:45 on 28th March 2014. In theatre and following a team briefing, at which the Paediatric Surgeon was absent, the Paediatric Anaesthetist, following arrival of the Paediatric Surgeon, performed a laryngoscopy which confirmed a grade 4 airway and this was communicated to the theatre team, The evidence leads me to find that thereafter there was a breakdown in communication between medical staff, as the Paediatric Surgeon decided to proceed to examine the larynx himself and the Paediatric Anaesthetist understood that there would be a further discussion as to whether to proceed with a rigid bronchoscopy or alternatively a flexible bronchoscopy and seek further specialist advice prior to surgery being undertaken. Despite the fact that the endotracheal tube was not guarded by an anaesthetist or the deceased prepared for a laryngoscopy, the Paediatric Surgeon inserted a bronchoscope and laryngoscope into the deceased's mouth to view the back of the throat, the endotracheal tube became dislodged and the deceased subsequently developed severe problems with a difficult airway, pneumothoraces and bleeding. Despite all resuscitative measures and interventions, she deteriorated and died at 18:01 on 28th March 2014.

Coroner's concerns

During the course of the inquest the evidence revealed matters giving rise to concern. In my opinion there is a risk that future deaths will occur unless action is taken. In the circumstances it is my statutory duty to report to you.

The matters of concern are as follows.

1. During the course of the inquest, I heard evidence from [redacted] Consultant Neonatologist, the independent expert instructed by the court that the grading system used by anaesthetists to assess a patient's throat prior to carrying out a laryngoscopy and assessment generally, namely the view being classified as follows:

- Grade I: Complete glottis visible
- Grade II: Anterior glottis not seen
- Grade III: Epiglottis seen, but not glottis
- Grade IV: Epiglottis not seen

is not a classification that is generally used in neonatal practice.

[redacted] advised that in fact this classification was 'rarely' used in neonatal practice and that there were discussions currently being undertaken as to creating a joint anaesthetic/neonatal guideline.

In Amelia's case, the issue as to whether or not there was a 'difficult/dangerous' airway was not handed over by the neonatologists to the paediatric anaesthetist prior to the surgery on 28 March 2014 as the neonatologists did not consider 4 attempts at intubation at birth to be indicative of a difficult airway.

[redacted] additionally stated that in his Trust discussions were taking place in the neonatology department with regard to using this classification system, but there is no national guideline to this effect.

Action should be taken

In my opinion action should be taken to prevent future deaths and I believe your organisation has the power to take such action.

1. I require to be advised as to whether the Department of Health is considering, along with the appropriate Royal Colleges, the introduction of a guideline to ensure clarity of assessment of the airway.

Your response

You are under a duty to respond to this report within 56 days of the date of this report, namely by 15 July 2016. I, the coroner, may extend the period.

Your response must contain details of action taken or proposed to be taken, setting out the timetable for action. Otherwise you must explain why no action is proposed.

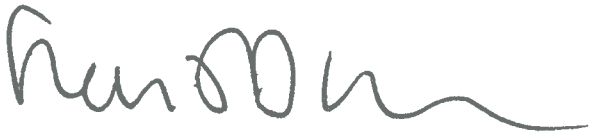
Copies and publication

I have sent a copy of my report to the Chief Coroner and to the following Interested Persons:

I am also under a duty to send the Chief Coroner a copy of your response.

The Chief Coroner may publish either or both in a complete or redacted or summary form. He may send a copy of this report to any person who he believes may find it useful or of interest. You may make representations to me, the coroner, at the time

of your response, about the release or the publication of your response by the Chief Coroner.



F Borrill **Date**
H.M. Area Coroner – Manchester City area