NHS
University Hospitals
of North Midlands
NHS Trust

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Your Ref: MJJ/JS/90147/2017

Our Ref: INQ/028/17

Date: 22 March 2018

STRICTLY PRIVATE & CONFIDENTIAL
Mrs M Jones
Assistant Coroner
547 Hartshill Road
Stoke on Trent
ST4 6HF

Dear Mrs Jones

Donald TILL

Further to my letter dated 15 January 2018, I am pleased to provide a response to your report under paragraph 7 of Schedule 5 of the Coroners and Justice Act 2009 and Regulations 28 and 29 of the Coroners (Investigations) Regulations 2013, addressing your concerns surrounding the death of Donald Till.

Recorded Circumstances of the Death
The conclusion of the inquest was that the deceased was a 68 year old man with a history of small bowel adenocarcinoma treated by surgery and chemotherapy in 2014. He presented to the Accident and Emergency Department at the Royal Stoke University Hospital on 2 January 2018 with a history of abdominal pain and vomiting. A CT scan showed a large bowel obstruction and a primary sigmoid colon cancer was suspected. He underwent emergency laparotomy on 4 January 2017. He had been kept nil by mouth on the day of the surgery. Previous anaesthetic charts were not available prior to the induction of anaesthesia. He was anaesthetised in theatre whilst in a bed. A number of co-morbidities made him a high risk patient; he suffered from obstructive sleep apnoea, using continuous positive airway pressure machine at night (CPAP); he had prominent front tooth crowns and a limited degree of mouth opening; the presence of a small beard and elevated BMI. A clinical decision was made not to use cricoid pressure. An epidural was administered and he was then positioned in a head up, ramped up position for anaesthesia. He was pre-oxygenated and anaesthetised using Fentanyl, Propofol and Atracurium induction agents. Immediately after he had received them he vomited large amounts of feculent material. His ward bed did not rapid tilt so he was placed head down over the edge of the bed to try to avoid contamination of the lungs. It was apparent that aspiration had occurred. A bronchoscope was sourced from thoracic theatre, initially the suction button was missing but this was found and a bronchiolar lavage was done using saline to wash the contaminated lungs. A nasogastric tube had not been inserted prior to anaesthetic but was inserted during the procedure. Antibiotics were administered intravenously. In view of the surgery required a decision was made to proceed. Multiple lesions were found and the bowel was resected. He was

transferred to the intensive care unit where he continued to deteriorate and he died at 11.30am on 5 January 2017.

The cause of death given after Post Mortem examination was: 1a – aspiration pneumonia, 1b – intestinal obstruction, II – adenocarcinoma of sigmoid colon (operated on).

Concerns

During the course of the inquest you felt that evidence revealed matters giving rise for concern. In your opinion, matters for concern are as follows:

1. The deceased's previous medical records were not available. Different clinical decisions might have been made had they been available.

2. The deceased was anaesthetised on a ward bed and it would have helped if he had been on a trolley with rapid tilt.

3. A bronchoscope was not part of the standard anaesthetic equipment trolley and when one was sourced it had a suction button missing.

4. Cricoid pressure and NG tubes were not used in this case.

You reported this matter under Paragraph 7, Schedule 5 of the Coroners and Justice Act 2009 and Regulations 28 and 29 of the Coroners (Investigations) Regulations 2013.

Action Taken

The University Hospital of North Midlands NHS Trust (UHNM) has taken the issues highlighted during the inquest seriously and indeed, I am grateful to you for raising potential for areas of improvement. For ease of reference, your concerns will be addressed in turn.

1. The Trust is in the process of establishing a fully electronic case notes system, however, this is a planned programme over a number of years due to the scale and complexity of the requirements which also requires funding. Nevertheless, there are currently well established processes in place to access medical records for urgent admissions. All staff have access to the Trust 'file-fast case-note tracking system' to identify the location of the medical records and are able to request retrieval of the records thereafter. Some medical records are stored off site due to the practical difficulties of storing vast amounts of paper-based records.

   The storage library on site is open from 8am to 10pm Monday to Friday and 9am to 5pm at the weekend and there is an on-call service if medical records are required urgently outside of these hours. It should be recognised however, that in an emergency situation, there is a possibility that the risks of not treating a patient outweigh the risks of waiting for previous records to be delivered and decisions to proceed are undertaken by the clinical teams.

   It is hoped that the electronic records system will alleviate the problems that we, and other hospitals, have and that all records will be immediately accessible 24 hours a day once a fully established system in in place.

2. Following the investigation into the care provided to Mr Till (Root Cause Analysis), it was identified that a rapid tilting trolley may have assisted in treating Mr Till. Measures were taken at the time to ensure that rapid tilt trolley was on standby for those high risk patients. It is my understanding that all beds and trolleys have a rapid tilt facility for emergency situations. This information has been fed back to the Corporate Governance Team in order to take forward any training needs.

3. In the initial stages of aspiration, 'blind' endotracheal suction can often suffice to treat the presenting problem. It is only once the majority of the aspirate has been removed by this technique, that it is possible to perform bronchoscopy to attempt to remove further debris and wash out the lungs. Throughout the UK, bronchoscopes are not a standard piece of equipment on the 'difficult airways trolley'. However, currently, our Critical Care areas are reviewing the use of disposable bronchoscopy equipment and once the efficacy of this relatively newly available equipment has been assessed as beneficial, we will further assess whether their use should be extended to being a standard piece of equipment in theatres.

4. Evidence was heard at the inquest regarding the use of cricoid pressure and the use of naso-gastric tubes in those circumstances where emergency abdominal surgery is required and this is set out further below:

    a. Cricoid pressure - it was heard at the inquest that several published reviews of the research regarding cricoid pressure concluded that there is little evidence to support the widespread belief that it reduces the incidence of gastric aspiration. There is evidence to suggest that the use of cricoid pressure impedes the management of the airway both making mask ventilation more difficult and also laryngoscopy and intubation.[i] There is also evidence that the application of cricoid pressure relaxes the lower oesophageal sphincter potentially making regurgitation and aspiration more likely.

    In addition, it should be noted that routine cricoid pressure has been removed from international guidelines and some UK institutional guidelines due to the poor evidence base as outlined above. Many UK anaesthetists, including those specialising in pre-hospital, emergency and trauma anaesthesia are no longer using cricoid pressure as part of their technique for rapid sequence induction.

    The decision to use cricoid pressure should therefore be based upon an assessment of the patient's airway together with the risk factors for those difficult airway management situations. This should be considered together with the risk of aspiration against the evidence that repeated attempts at intubation, are associated with rapidly increasing risk of aspiration[ii] and that if a patient should vomit with cricoid pressure applied oesophageal rupture (leading to mediastinitis with a mortality f 13-100%) can occur.[iii]

    This balancing of individual risk is undertaken by the treating anaesthetist, however, I understand that here at UHNM, a consultant anaesthetist is consulted for all potentially high risk cases.

b. The joint RCS/ASGBI emergency general surgery commissioning guidelines recommend placement and regular aspiration of nasogastric tubes in all patients with either large bowel or small bowel obstruction. However, this is a guideline only and a decision not to place a nasogastric tube can be taken by the treating surgeon in circumstances where they feel it would not be appropriate as outlined in evidence provided at the inquest.

   I understand that Mr Till's case has already been presented at the departmental mortality and morbidity meeting however, following the inquest, the evidence base (as discussed above) will be presented to remind clinicians of the need to undertake a more formal risk assessment and to ensure that the surgical teams gave similarly considered the risk benefit for a nasogastric tube when booking cases for CEPOD (emergency) theatre.

I sincerely hope that this report provides you with assurance that the Trust has taken the matters arising from the inquest touching upon the death of Mr Till seriously. The Trust strives to provide a high standard of care to all patients and I am grateful to you for raising these matters on this occasion.

Should you wish to discuss any aspect of this report further, please do not hesitate to contact me directly.

Yours sincerely

PAULA CLARK
CHIEF EXECUTIVE

[i] Eur J Anaesthesiol 2017; 34:477-484 and Trends Aneas Crit Care 2012; 2(3)123-7
[ii] Acad Emerg Med 2013; 20(1); 71-78
[iii] Anaesthetics 1992; 47(9) 732-5 and Anaesthesia 1991; 46: 40-41

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