

We are all human but together we can prevent unrecognised oesophageal intubation

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No one enters a career in medicine with the intention of doing harm, quite the opposite, we are motivated by a passion to help others, treat illness, and improve quality of life. However, as medical practitioners we are sometimes required to attend coronal inquests as a result of events that have happened to patients under our care.

Each and every death is a tragedy for the family and friends of the deceased. It can also place a huge emotional burden on the professionals involved. The coroners' duties are often summarised as 'Who', 'Where', 'When' and 'How' the deceased died, but they have more nuanced responsibilities as well. One of which is to make recommendations to prevent further deaths from occurring. These were previously known as 'Rule 43 reports' but are now referred to as Prevention of Future Death (PFD)

reports, as set out in paragraphs 28 and 29 of the Coroners (Investigations) Regulation 2013 (bit.ly/3ncjcmI). For deaths occurring in healthcare settings, presidents of medical royal colleges, specialist societies and trust CEOs are commonly cited as an 'interested party' in PFD reports, and they have a statutory obligation to respond within 56 days. They must either give details of actions taken and to be taken, including a timetable, or explain why they believe no action need be taken.

In the last five years, the RCoA President has received 12 such reports. They relate to bleeding, sepsis and humidification, but by far the most common theme (seven out of 12) is the airway. Of these there is one depressingly common theme: unrecognised oesophageal intubation.

As a speciality, we have demanded continuous monitoring of exhaled carbon dioxide as a minimum standard for all areas where anaesthesia and tracheal intubation are performed.

In the most recent iteration of *Recommendations for standards of monitoring during anaesthesia and recovery 2021*, (bit.ly/3DqgCBT), this is extended to the transfer of any patient with an artificial airway from the operating theatre to recovery, as well as in recovery while an artificial airway remains in place. In the report of NAP4, Cook et al. (bit.ly/3nqXh4s) recognised the higher incidence of undetected oesophageal intubation in areas outside of the operating theatre, particularly intensive care and emergency departments. It is well noted that this has now changed; training, education and equipment provision are all improved and so has the safety of intubation in those areas.

So why does unrecognised oesophageal intubation still cause patient harm and death, notably now in the operating theatre? The answer, I believe, lies not just with the technical skills of the intubator and the knowledge to interpret a capnograph trace. These are core skills embedded in our psyche from day one of our careers as anaesthetists. Rather the problem lies with the design of our systems, environment and equipment, and our attitude to team working and non-technical skills. We must use human factors and ergonomics strategies to prevent harm from oesophageal intubation in the future.

Glenda Logsdail was a fit and healthy 61-year-old who died as a result of an undetected oesophageal in August 2020. The inquest into her death in July 2021 resulted in the most recent PFD report to be sent to our President (bit.ly/3nqIKWV). The response to this was sent back to the chief coroner in November 2021 and is a collaboration between the RCoA, the Association of Anaesthetists, and the Difficult Airway Society. The actions proposed and the timelines are outlined in the table. I would urge you read this list, seek out

the resources on our website (rcoa.ac.uk/prevention-future-deaths) and use them to make changes in your hospital, department, and theatre suite.

It is fair to say that it was with a very heavy heart that everyone involved in our response realised that as a speciality we still haven't done enough to eliminate unrecognised oesophageal intubation from our practice. We may never be able to eliminate human fallibility, but we can design systems, equipment and environments to minimise its likelihood. We can use barriers to trap errors, put in place mitigations to reduce impact, and train, educate, rehearse and simulate to better manage critical incidents when they occur.

Finally, I would like to acknowledge the dignity and bravery of Glenda's family who, like Martin Bromily before them, seek to work collaboratively and constructively with all of us to prevent a similar tragic loss of a life.

This faith and belief in our speciality to improve MUST be listened to. We need to acknowledge, accept, and most importantly act, upon the recommendations and actions detailed in our President's response to this latest PFD report.

Action	Date
Conducting a survey questionnaire of knowledge of capnography	Baseline: November 2021 Repeated: November 2022
Systematic campaign of articles and presentations to raise awareness	From November 2021 and throughout 2022
Including knowledge of No trace, wrong place in the Initial Assessment of Competence	August 2021
Developing short, flash cards scenarios for theatre team training	Launched November 2021 All departments asked to use and provide feedback by 31 March 2022
Publishing further, more in-depth simulation scenarios for team training	Spring 2022
Working with the Association for Anaesthetic and Respiratory Device Suppliers (BAREMA) to standardised monitor screen layouts and develop 'smart alarms'	Ongoing
Working with other groups to raise awareness including FICM, College of ODPs and Association for Perioperative Practice	Ongoing