8 March 2023

Dear Dr Henderson,

Re: Regulation 28: Report to Prevent Future Deaths in the matter of Teegan Marie Barnard

Thank you for sending us a copy of your Regulation 28 Report regarding the sad death of Teegan Marie Barnard. We have jointly reviewed the information available to us in the report via our Safe Anaesthesia Liaison Group (SALG). SALG is a collaborative project between the Association of Anaesthetists, NHS England's Patient Safety team and the Royal College of Anaesthetists. One of its core objectives is to analyse anaesthesia-related serious incidents and to share the learning with the specialty across the UK.

Bilateral pneumothoraces occurring on emergence from a general anaesthetic, especially one for surgery that did not include thoracotomy or thorascopy, is so rare that most anaesthetists will never encounter such a situation. All anaesthetists are taught the 8 reversible causes of cardiac arrest through the Resuscitation Council's Advanced Life Support course, or an equivalent, that they must complete as part of their training and maintain their competencies throughout their career. Bilateral pneumothoraces are mentioned only in the setting of trauma in the Resuscitation Council's guidelines. For this reason, we will share the learning from Teegan's death that bilateral pneumothoraces can be cause of failure to ventilate leading to cardiac arrest in the absence of trauma or thoracic surgery. We will do so via SALG's Patient Safety Update, which is shared with all members of our respective organisations, and via our education and events.

There are mechanisms to support staff to respond to challenging clinical emergencies, such as that described in your report. All organisations should have a clear system for calling for additional clinical support in emergency situations and it is clear from your report that this was in place at St Richards Hospital, Chichester. Cognitive aids, such as that produced by the Association of Anaesthetists[1] can be helpful during a crisis when the cognitive load can impair performance. They are only effective, however, if the organisation has ensured that all staff are given the time to become practised in their use. In the recent Association of Anaesthetists and Difficult Airway Society publication on human factors in anaesthetic practice[2] and in Royal College guidelines[3], we recommend that this is done through multidisciplinary team training, so that the team that works together can learn together how to respond to unexpected or uncommon emergencies.

Your report highlights the importance of reporting, investigating and sharing learning from critical incidents. The Royal College guidelines[3] outline in detail the systems that departments should have in place to respond to critical incidents, emphasising both the need to investigate and embed the learning from such incidents and the importance of supporting patients, patients' family and the staff involved.

A systems-based approach to learning from patient safety incidents is acknowledged as the most effective way to understand how incidents happen and the factors that contribute to them, as included in both our guidance and the recently published NHS England Patient Safety Incident Response Framework. Both our guidance and the new framework also focus on the compassionate engagement of those affected by the incident, including staff members who

may be affected by the "second victim" phenomenon and be severely emotionally affected by this. Organisations should have formal, sympathetic and structured support available for all those affected by patient safety incidents. Patient safety incidents can be subject to multiple investigations from both within the organisation and by external bodies. Consideration should be given to how these are coordinated in order to reduce the duplication of effort, to ensure that the learning for the system as a whole can be embedded into practice as soon as feasible and to prevent compounded harm to those involved during the investigations.[4]

We have reviewed our guidance in light of your report and we have recognised that we should be more explicit about the need for a standardised process of investigation which is automatically triggered immediately after a catastrophic event. This should ensure that responsibility for steps such as downloading information from the anaesthetic machine or the temporary removal of equipment from service for checking, is removed from those directly involved. We will amend our guidance accordingly, promote these changes to the specialty and embed this change into practice through the RCoA's Anaesthesia Clinical Services Accreditation scheme. We also note that the implementation of our recommendation that all departments should have an appropriate electronic anaesthetic record system, linked to the wider electronic patient record, would aid the investigation of incidents.

We would be happy to respond to any questions that you might have.

Yours Sincerely

[redacted]

President
Royal College of Anaesthetists

[redacted]

President
Association of Anaesthetists

References

1. The Association of Anaesthetists, Quick Reference Handbook, 2018 (updated 2019, 2021, 2022) (https://anaesthetists.org/Home/Resources-publications/Safety-alerts/Anaesthesia-emergencies/Quick-Reference-Handbook)

2. The Association of Anaesthetists and the Difficult Airway Society, Implementing human factors in anaesthesia: guidance for clinicians, departments and hospitals, 2023 (https://anaesthetists.org/Home/Resources-publications/Guidelines/Implementing-human-factors-in-anaesthesia-guidance-for-clinicians-departments-and-hospitals)

3. The Royal College of Anaesthetists, Guidelines for the Provision of Anaesthesia Services: The Good Department, 2021 (updated 2023) (https://www.rcoa.ac.uk/gpas/chapter-1)

4. NHS England, Patient Safety Incident Response Framework: Engaging and involving patients, families and staff following a patient safety incident, 2022 (https://www.england.nhs.uk/publication/patient-safety-incident-response-framework-and-supporting-guidance)