Anesthesia Quality Institute American Society of Anesthesiologists*

Learning From Others: A Case Report from the Anesthesia Incident Reporting System

Case 2021-12: Avoiding the Blame Game

This event occurred in an outpatient setting. The muscular, red-headed patient reported high anesthetic requirements and that he had woken up during every procedure he had. I told my resident to have extra propofol ready for LMA insertion. Resident pushed 200 of propofol and 100 of fentanyl; I reached for the extra propofol, only 20 mL had been drawn up. LMA was placed, and patient proceeded to sit up on the OR bed. The OR staff successfully kept him from standing up — by then I had more propofol, pushed it. Talking with resident later, she said she thought that having more in the room was what I meant. Frustrating.

From the tone of the report, it is apparent that the faculty involved felt that the resident was primarily or even solely to blame for this event by not drawing up extra syringes of propofol as intimated. Clearly, this was a preventable error, but the error was not based on an individual lack of skill or knowledge or even willingness – it represented a teamwork failure. By definition, a teamwork failure involves more than a single member of the team, and improvements in teamwork require understanding where each team member, not just the one who ultimately "failed," could have been more effective. This report thus provides an opportunity to understand more deeply where and how teamwork failures arise and how to prevent them.

High-reliability organizations such as aviation and nuclear power have long acknowledged the power of teamwork and have benefited from this understanding: health care lags in that teamwork is often preached (TeamStepps) but often not practiced effectively. Too often in health care, after teamwork training, we revert to our siloed roles and responsibilities and do not continue to fully embrace the concept of teamwork. Over the two decades since To Err is Human was published, multiple studies have linked poor teamwork quality to increased surgical duration, number of technical errors in an operation, and stress levels of team members (To Err Is Human: Building a Safer Health System. 2000; Surgery 2007;142:102-10; Qual Saf Health Care 2009;18:109-5; Am J Surg 2010;199:60-5). In addition, improved teamwork has been linked to a reduction in morbidity and mortality (J Am Coll Surg 2008;206:107-2). However, translating research into daily practice and into an ethos for performance has proven to be very difficult, as this report demonstrates. The report does, however, provide us with an opportunity to explore how teamwork failed here and to perhaps understand bet-



ter what effective teamwork looks like in our everyday lives.

The first failure in this event was in communication - a failure on the part of the faculty to adequately communicate the severity and potential impact of the patient's tolerance for induction agents. Communication failure stubbornly continues to be one of the most common contributing factors to sentinel events reported to The Joint Commission (asamonitor. pub/3iJGgQn). Common communication failures include direction (to whom is the communication directed?), timeliness of the communication (was the team ready to hear?), and meaning (did the faculty adequately describe the situation?) (Qual Saf Health Care 2004;13:330-4). This report reads as though the faculty felt they had adequately communicated the history – but it is obvious from the sequence of events that the resident did not fully "hear" what was being said, and that the faculty did not recognize that the communication had failed. Invoking a "speak back" protocol here may have felt awkward, but working to at least hear the resident's plan for induction may have uncovered the fact that the resident had not grasped the significance of the patient's history. There was no apparent attempt from the faculty to verify that the resident clearly heard and understood what the faculty had attempted to communicate.

Whether the resident heard the full description of or simply did not appreciate the potential impact of the patient's history is unclear; it is clear that the faculty and resident had not achieved a shared mental model of this patient's unique physiology and did not share a common plan for induction. The concept of a shared mental model again comes to us from aviation, and more specifically from the aerial missions of WWII. Prior to any bombing run, the entire cohort of bomber teams and fighter squadrons would meet to brief on the mission – the entire route, where

enemy forces were expected, planned engagements with the enemy, and what the exact target and ultimate mission was. It is not difficult to imagine the focus and concentration of every member during those briefings. All knew that some would not return and that the only compen-

sation for the inevitable loss of life was success of the mission. In health care, loss of life remains a risk of any of our "missions." But it is not our loss of life, and so too often we are distracted and unfocused during our briefings (what could go wrong?). All too often communications and briefings are done hurriedly and by rote, without the pause and focus that effective communication and briefings require.

The faculty, and perhaps the resident, also failed in one of the well-recognized tools to prevent skill-based errors - that of S-T-A-R, or Stop Think Ask Reflect. A brief one-second pause prior to initiating a well-rehearsed sequence, such as medication administration or induction of anesthesia, has been reported frequently to reduce skill-based errors by as much as 90%. In this instance, the faculty, who were well aware of the potential need for well more than 200 of propofol, should have taken that brief STAR moment to check that all of the critical tools for induction and placement of the LMA were at hand. Had they done so, they likely would have noticed only a single syringe of propofol. Barriers to implementing even this simple check can be difficult in our prevailing culture of productivity over all else. The incessant pressure to get the case under way pushes us to truncate briefings, or to not move deliberately or mindfully. Saving a minute due to haste can, as in this case, cause additional "waste" as the entire team had to fight to get the patient under control and safely off to sleep. And, of course, it could have led to even more disastrous results. While efficiency is to be sought, it should never come at the risk of safety.

Finally, the apparent willingness of the faculty to place the blame for this failure entirely on the resident provides an opportunity to explore the difference between a culture of "blame and shame" to one of curiosity. When things go awry, it is quite easy to identify the individual who ultimately "failed" and then blame them and conveniently absolve all others of responsibility. However, as noted above, the faculty had multiple opportunities to prevent failure – first, to ensure that the resident adequately heard and understood not only the patient history, but then to explicitly lay out the plan ("have three syringes of propofol drawn up"). Additionally, on arrival into the OR, the faculty should have visually confirmed that additional propofol was indeed drawn up. Yes, the resident failed in following instructions, but the faculty also missed opportunities to "rescue." Instead of reporting this as a failure on the resident's part, a curious approach would have asked, "How could the team have been more effective? How did I fail to communicate the significance? Did I miss that the resident was distracted or otherwise engaged? When I entered the room, how did I miss that the extra propofol was not drawn up?" This approach allows for exploration of the entirety of the teamwork failures and permits a more robust set of interventions to prevent similar failures in the future.

Finally, this event may represent a larger issue - that of leadership. It is the responsibility of the leader to ensure that all team members are prepared, informed, and ready to succeed. By viewing the resident as the primary failure node, the faculty missed an opportunity to learn and grow into being more effective leaders. It was also a missed opportunity to teach the resident an appropriate approach to a teamwork failure. Certainly transformational leadership, where the uppermost echelon of the organization can provide an inspiring vision, is critical to improving safety culture; however, such a vision is likely to fail without leaders at every level embracing and promoting these safety behaviors (Health Care Manage Rev 2009;34:300-11). ■

Each month, the AQI-AIRS Steering Committee abstracts a patient history submitted to AIRS and authors a discussion of the safety and human factors challenges involved. Absence of commentary should not be construed as agreement with the clinical decisions described. Reader feedback can be sent to <code>airs@asahq.org</code>. Report incidents or download the AIRS mobile app at <code>www.aqiairs.org</code>.