Anesthesia Quality Institute®
American Society of Anesthesiologists®

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

Case 2020-11: "I Can't Take It Anymore"

Case presentation: *A trauma patient from the emergency department showed up as a "surprise" to the OR with no known history. The patient was shot multiple times in the head, chest, and abdomen. The surgeon told us that the patient arrested in the trauma bay and a thoracotomy was done in the emergency department. When we got the patient into the OR, his end-tidal CO_2 was 9 mm Hg and he had no pulse. The surgeons put a rapid infusion catheter into his femoral vein, and we began to resuscitate him. We didn't know his COVID status so the entire team wore N95 masks and eye protection in addition to having the room temperature set at 80 degrees because he was hypothermic and coagulopathic. The patient was in and out of cardiac arrest during the entire procedure, required frequent doses of intra-cardiac epinephrine, and was defibrillated multiple times. The blood bank called to say that we had used up almost all of his blood type. He ultimately was found to have a "shredded" superior vena cava and significant abdominal and thoracic bleeding. The surgeons decided to pack and run to the ICU. He was transferred to ICU with the rapid infuser running and the massive transfusion protocol cooler wheeled alongside. He ended up receiving another 40 units in the ICU and died three hours later.*

A patient was brought to the OR for profuse bleeding from everywhere. He had drowned in a lake where he had been submerged for several hours before being rescued and resuscitated. Both pupils were fixed and dilated when the patient was brought to the OR. The patient arrested several times and was declared dead after being in the OR for about an hour.

Two gunshots, a pedestrian hit by a car, and a stabbing all showed up to the OR at once. We were equipped to run two ORs and I had two CRNAs and a resident with me. Fortunately, the OB floor was quiet so they came over to help while we started to go through the call-in list. Everybody was taken care of, but I had the feeling that we were one emergency away from having to ration care.

Health care worker burnout, which is defined as a sense of mental and physical exhaustion, depersonalization, a lack of self-worth, or disconnection from work or colleagues, can lead to potentially devastating consequences for medical professionals and their families. Physicians of all specialties are experiencing burnout, and the COVID-19 pandemic is making a bad situation worse. In addition to burnout, physicians who are working on the front lines of the pandemic are also at increased risk for alcohol and drug abuse, post-traumatic stress disorder, and depression (*BMC Public Health* 2020;20:1230). Civil unrest and unprecedented levels of violence in some parts of the United States are stretching already stressed health care systems to the breaking point.

ASA is interested in collecting vaping-specific data to formulate recommendations for anesthesiologists taking care of these types of patients. The AIRS database is now capable of receiving data for this purpose. Please enter any available information at **www.aqiairs.org**.

Anesthesiologists are on the front lines of care in the OR and ICUs and may be at an even higher risk of fatigue and burnout. Anesthesia providers typically work in an environment that demands excellence and in which mistakes are not tolerated. Burnout and fatigue have been reported in anesthesiology trainees (*Anaesthesia* 2019;74:1240-51), nurse anesthetists, and attending anesthesiologists (*Psychol Health Med* 2019;24:620-4; *Anesth Analg* 2017;125:2009-18). Although burnout is typically described as a feeling of disengagement, it may also manifest as exhaustion. In one study, 67% of respondents to a survey reported higher scores for exhaustion than for disengagement. The authors concluded that burnout symptoms were common but reflected more in exhaustion than disengagement. Interestingly, the difference in reports of the exhaustion and disengagement that the authors found for anesthesiologists were larger than typically reported by health care workers (*Psychol Rep* 2020;123:1282-96). No matter how burnout presents, many anesthesiologists share characteristics that place them at high risk of burnout and impaired mental health (*Anesth Analg* 2017;125:2009-18). People at increased risk for burnout include those who are highly educated, younger, unmarried, and who have high expectations and low self-esteem (*Annu Rev Psychol* 2001;52:397-422). This describes many of our colleagues. Anesthesiologists are not alone, however. Burnout is also prevalent among neurosurgeons (*World Neurosurg* Aug 2020; *Neurosurgery* 2018;83:582-90), among other surgical specialties, and has been reported to be as high as 42% among all medical school faculty (*J Occup Environ Med* 2020;62:611-7). Increasing clinical effort, higher levels of stress in the workplace, lower levels of resilience, and less personal time were all associated with an increased risk of burnout.

What can be done to mitigate the effects of burnout? The best answer is to reduce workload and emotional and cognitive stress in the workplace. However, given the current pandemic and civil unrest, the next best strategy is to focus on physician wellness programs. Commercially available apps are available to teach breathing/meditation (e.g., Headspace, which is currently free for health care professionals). In more extreme cases, web-based cognitive behavioral therapy programs such as MoodGYM, and suicide prevention apps such as Stay Alive and Virtual Hope Box, may offer an effective solution for anesthesiology professionals who are severely affected by burnout (*Acad Psychiatry* 2018;42:109-20). Abbreviated mindfulness courses can also alleviate the symptoms of burnout. Anesthesiology departments in locations that are particularly affected by the pandemic or violence might consider developing such a program (*Acad Psychiatry* 2018;42:109-20). Health care workers who are in immediate need of assistance should reach out to their employee assistance program.

The National Suicide Prevention Lifeline is a national network of local crisis centers that provides free and confidential emotional support to people who are considering suicide or experiencing emotional distress and is available 24 hours a day, seven days a week. If you or a colleague is struggling with thoughts of suicide or emotional distress, please call the National Suicide Prevention Lifeline at 1 (800) 273-8255. ■

Review of unusual patient care experiences is a cornerstone of medical education. Each month, the AQI-AIRS Steering Committee abstracts a patient history submitted to the Anesthesia Incident Reporting System (AIRS) and authors a discussion of the safety and human factors challenges involved. Real-life case histories often include multiple clinical decisions, only some of which can be discussed in the space available. Absence of commentary should not be construed as agreement with the clinical decisions described. Feedback regarding this article can be sent by email to **airs@asahq.org.** Report incidents or download the AIRS mobile app at **www.aqiairs.org.**