AMA Journal of Ethics®
March 2025, Volume 27, Number 3: E171-177

CASE AND COMMENTARY: PEER-REVIEWED ARTICLE

How Should Senior Surgeons Help Junior Colleagues and Trainees Experiencing Regret?

Carlie Arbaugh, MD, MS and Kimberly E. Kopecky, MD, MS

Abstract

Unanticipated outcomes and adverse events are inevitable in surgical training and practice and tend to elicit complex emotional experiences, including regret. Navigating these experiences with support from mentors and peers is essential for surgeon well-being, a healthy surgical culture, and optimal patient care. Critical incident stress debriefing and metacognitive behavioral models offer tools senior surgeons can use to help junior surgical colleagues in the wake of unanticipated outcomes and adverse events.

Case

Dr R is a chief surgical resident caring for the patient, SM, who is currently admitted to the surgical intensive care unit at an academic health center. Dr R has been caring for SM for 2 weeks; 3 days ago, they decided that it was clinically appropriate to remove SM's nasogastric tube (NGT). Speech and swallow therapists evaluated SM for dysphagia and authorized SM to consume thin liquids and minced, moist food by mouth. SM continued to make progress eating and drinking with assistance from a nurse until early this morning, when SM suddenly aspirated. SM's blood oxygen levels dropped, even with immediate supplemental oxygen intervention. SM's oxygen saturation percentages remained in the low 80s, at least 15% below normal, and Dr R decided to reintubate SM.

The next morning, Dr R commented to Dr A, the attending surgeon, "If only I hadn't let SM eat." Dr R tells Dr A that they regret letting SM eat and drink food by mouth. How should Dr A respond?

Commentary

Unwanted outcomes are inevitable in surgical training and practice. Every surgeon has experienced, or is likely to experience, their own version of SM's case in the role of either Dr R (surgery resident physician) or Dr A (attending surgeon). These scenarios are common yet can feel unique and isolating. If surgeons do not receive appropriate support, regretted outcomes can negatively influence their well-being, team dynamics, surgical culture, and patient care.[1] Indeed, surgeons are susceptible to both burnout and "second victim" syndrome related to adverse events and patient deaths.[2,3,4,5,6,7]

Demanding schedules comprising clinical, teaching, administrative, research, and personal responsibilities can make it difficult to prioritize debriefing challenging cases outside of formal presentations like morbidity and mortality conferences. Furthermore, the primary purpose of formal presentations is to analyze, learn, and improve from an academic and clinical perspective rather than to foster surgeons' emotional processing and growth.

Using the above case example, we offer a framework that senior surgical team members can use to help junior members as they navigate complex moral emotions endemic to surgical training and practice. Our framework is modeled after critical incident stress debriefing and is heavily influenced by metacognitive behavioral models,[8,9] which have been successfully adapted to support medical and surgical trainees after distressing clinical events.[10,11,12,13,14,15,16] Although there is evidence to support proactive clinical debriefing,[17] our proposed framework focuses on debriefing following incidents that disrupt surgeons' trust in the health care system (eg, an adverse outcome), with the goal of mitigating the negative effects of unanticipated and traumatic events or outcomes.

Who, What and Why, Where and When, How

For whom is this framework designed? Our adapted framework is appropriate for junior-senior dyads—such as a senior attending surgeon and junior attending surgeon, attending surgeon and fellow, and resident and medical student. Dyadic support is important, given that debriefing behaviors are not often modeled in surgical training. In a survey of 125 surgical residents, 88% had personal involvement in medical errors, yet only 24.3% received emotional support following those adverse events.[18] Similarly, a cross-sectional survey of 126 practicing surgeons found that 80% reported at least one intraoperative adverse event in the past year.[7] These alarming statistics underscore the need for proactive and empathetic support for surgeons at all levels of training who are navigating emotionally laden patient experiences.

Regardless of training level, it is normal for each team member to feel responsible for an unanticipated outcome. For example, the surgical intern may feel most responsible, given that they often have the most contact with the patient and family during the hospitalization and are tasked with placing orders and consults, removing drains, and closely monitoring patient status. The senior resident or fellow can feel most responsible because they participate in more complex operations and generate plans with attending surgeons. Finally, an attending surgeon can feel most responsible, given that they oversee and are medico-legally responsible for all clinical decisions, in addition to often having a longitudinal relationship with the patient from the time of the initial surgical consultation.

In scenarios involving junior and senior surgeons, the junior surgeon may not always feel comfortable reaching out to the senior surgeon for support. Such a move signals vulnerability, which can be uncomfortable. It is particularly important for a senior surgeon to respond by setting aside time and creating a safe space to touch base when a junior surgeon initiates discussion. When the junior surgeon does not ask for support but offers more subtle clues, it is important for the senior surgeon to follow their instincts and check in. In the "How" subsection below, we describe 5 steps of this process.

Which emotions might emerge, and why do they matter? In this case, Dr R made the decision to remove SM's NGT based on a well-informed clinical assessment with

appropriate oversight and approval from Dr A. With assistance from the speech and swallow therapists and the nurse, SM initially made progress eating and drinking. Unfortunately, SM later aspirated, resulting in decompensating respiratory status, and required reintubation. Dr R, who likely was managing this particular complication for the first time, assumed self-blame and expressed regret for advancing SM's diet.

A large systematic review found that "anxiety, guilt, sadness, shame," and "interference with professional and leisure activities" were the most commonly reported adverse emotions following patient-related complications.[19] In one study, 84% of surgeon respondents reported experiencing a combination of anxiety, guilt, sadness, shame, and anger in response to intraoperative adverse events,[7] and, in a more recent survey, up to a third of surgeons reported that patient deaths impacted their professional career, emotional well-being, or social life, with 18% having considered taking a break and 12% having considered leaving their career.[20] Self-perceived medical errors can also be accompanied by feelings of remorse or inadequacy; fear of retaliation, judgment, and retribution; and anxiety or insomnia.[18,21] These findings can help us better understand, normalize, and support surgeons' navigation of complex emotions following adverse patient events.

Where and when should check-ins and debriefs happen? Protected time and space are needed for debriefs and check-ins. In the above case, we recommend that Dr A have an initial conversation with Dr R, ideally within a day or two of the aspiration event. If possible, this conversation should occur in a private setting rather than in a patient care area, crowded elevator, or busy cafeteria in order to minimize interruptions. In addition to protecting privacy, Dr A should practice deep listening to promote psychological safety and facilitate an open, authentic conversation. A face-to-face discussion is preferable, but a phone conversation can be effective if time constraints and obligations make an in-person meeting impractical. After the initial discussion, Dr A should follow-up with Dr R within the week via phone, text, or email to check in. Additional follow-ups would depend on the needs of the resident.

How should surgical trainees and colleagues be better supported? Providing support for a surgical trainee or colleague dealing with a challenging patient scenario requires situational awareness and emotional intelligence, including skillful use of interoception, compassion, and empathy. A colleague in need of support will often offer cues, including overt statements, tone of voice, body language, or behavior change. In this case, Dr R's stating "If only I hadn't let SM eat" is a hint to Dr A that Dr R might be indulging in self-blame for the patient's aspiration.

We have adapted the critical incident framework[8,10,16] and incorporated metacognition tools for application to surgeon support in 5 steps. (See the Supplementary Appendix for definitions and resources.)

1. *Review facts*. The senior surgeon and junior surgeon together review key case facts, including sequence of events and objective outcomes. This step can be brief. Dr R and Dr A would review that SM had minimal NGT output and was having bowel movements, that a speech and swallow therapy assessment was ordered and followed, and that nursing assistance with eating was provided. When SM aspirated, appropriate clinical assessment was performed and appropriate treatment was provided.

2. *Understand thoughts*. The senior surgeon elicits the underlying narrative that the junior surgeon has ascribed to the case, such as "I made the wrong decision" or "I must be a bad surgeon." Dr R would then be encouraged to explore the underlying narrative by sharing their inner dialogue: "If only I hadn't let SM eat" or "It was my fault that SM aspirated and needed to be reintubated." During this discovery phase, it is important for the senior surgeon to refrain from negating the junior surgeon's self-assessment, instead simply holding space with the junior surgeon to explore a natural response to a challenging experience.

3. *Recognize reactions*. The goal of this step is to support the junior colleague in distinguishing between facts and thoughts. Gentle exploration of these different "truths" enables the junior surgeon to decouple event from reaction and thoughtfully consider alternative conclusions. Dr A would demonstrate, based on the available evidence, that it was not Dr R's fault that SM aspirated. In a case in which the surgeon was primarily responsible for the unwanted outcome (as might be the case with an intraoperative error), it is common for the reaction to overshadow the incident. Thoughts such as "I shouldn't be a surgeon" or "I should leave clinical practice" can feel like facts in the moment but are an exaggerated and understandable emotional response to the situation. It can be helpful to identify how emotions may be manifesting in the body physically. This embodiment can be monitored in tandem with emotional processing and resolution. Common expressions of emotional stress to look out for include new or worsened insomnia, headaches, clenching of the jaw, tightness of the neck and shoulders, gastrointestinal upset, and so on.

4. *Normalize experiences*. We recommend that the senior surgeon discuss how the clinical situation affected them or share a time when they felt similarly. Clinical details should not be centered; reflection on emotions like regret or guilt should be prioritized. Normalizing experiences and emotions is important for demonstrating vulnerability and common humanity, which tends to build trust and strengthens relationships between surgical colleagues. Awareness and recognition of these experiences are key for surgeons' cultivation of connection, compassion, and resilience.

5. *Plan together*. Lastly, the senior surgeon should guide the junior surgeon in developing a plan. This is an opportunity to share healthy coping strategies or ask open-ended questions that prompt the junior surgeon to devise their own healthy coping strategies. In some cases, offering peer support or professional mental health resources might be helpful. Before closing the discussion, a plan should be made to check in again.

Conclusion

A surgeon can experience sadness, worry, and stress when an undesired patient outcome or patient suffering occurs and the surgeon feels responsible. Surgeons, especially trainees, experience regret over specific patient management decisions and frequently resort to self-blame following a negative patient outcome.[22] Regret and self-blame can result in anxiety, guilt, shame, and perseverative negative unhelpful thought patterns. Unchecked, these experiences can have long-term cumulative effects on personal and professional identities.[22]

In this commentary, we have outlined the ways in which surgeons can offer support for colleagues experiencing regret and other moral emotions that are endemic to the practice of surgery. Our adapted framework, outlined above, can be an additional tool in the toolbox for surgical colleague support.

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Carlie Arbaugh, MD, MS is a surgical resident at Stanford Health Care in Stanford, California. Her academic pursuits are focused on health equity, lifestyle medicine (including nutrition and culinary medicine), clinician well-being, medical and surgical education, and palliative care.

Kimberly E. Kopecky, MD, MS is a dual-boarded physician in general surgery and hospice and palliative medicine and an assistant professor in the Division of Surgical Oncology at the Heersink School of Medicine at the University of Alabama at Birmingham. She has tailored her clinical and nonclinical training to conducting research on the surgical experiences of patients with advanced cancer and understanding how these experiences influence perioperative decision-making and recovery from major abdominal cancer operations.

Editor's Note

The case to which this commentary is a response was developed by the editorial staff.

Citation

AMA J Ethics. 2025;27(3):E171-177.

DOI

10.1001/amajethics.2025.171.

Acknowledgements

The authors thank Dr Anna Newcomb for reading a prior draft of this manuscript and Drs Adrienne Mann and Tyra Fainstad for their support as coaches.

Conflict of Interest Disclosure

Authors disclosed no conflicts of interest.

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ISSN 2376-6980