

Tales From VA Anesthesiology

Thomas Hickey, MD

A 99-year-old veteran, his family, and an anesthesiologist practice shared decision making to ensure patient-centered care before a procedure.

Thomas Hickey is a Staff Anesthesiologist at VA Connecticut Healthcare System and an Assistant Professor at Yale University School of Medicine in New Haven, Connecticut.
Correspondence:
Thomas Hickey
(thomas.hickey3@va.gov)

The patient grabbed my attention as I glanced through our clinic schedule. It was his age: He was 99 years old and scheduled for eye surgery. The plastic surgery resident's note read: "Patient understands that this would involve surgery under general anesthesia and is agreeable to moving forward...Extremely high risk of anesthesia emphasized."

I reviewed the patient's history. At baseline, he had severe pulmonary hypertension, severe aortic stenosis (AS), diastolic heart failure, chronic atrial fibrillation, chronic kidney disease (estimated glomerular filtration rate of 26 mL/min [normal is > 60 mL/min]), anemia (hematocrit 26%), and a standing do not resuscitate (DNR) order. His maximal daily exercise was walking slowly across a room, primarily limited by joint pain. Recent geropsychiatry notes indicated mild cognitive impairment. The anesthesia record from an urgent hip fracture repair 7 months before under general anesthesia was unremarkable.

I phoned the attending plastic surgeon. Our conversation was as follows:

"Hi, I'm about to see a 99-year-old patient with a DNR who is scheduled for resection of an eyelid tumor. His medical history makes me nervous. Are you sure this is a good idea?"

"Hmmm, 99-year-old...okay, that's right," he responded. "He has an invasive squamous that could become a big problem. The actual procedure is under 10 minutes. Waiting for the pathology report will be the longest part of the procedure."

"Can it be done under local?" I asked.

"Yes," he replied.

"Okay, I'll talk to him and call you back."

I found the patient in the waiting room, flanked by his 2 daughters and invited them into the clinic room. After introductions, I began asking whether they had any ques-

tions about the anesthesia. By midsentence a daughter was prompting him to discuss what happened "last time." He described a history of posttraumatic stress disorder (PTSD) stemming from his hip surgery, which he blamed squarely on the anesthesia. His emotion was evident in the gathering pauses. "I hate that I am so emotional since they kept me awake during my surgery."

Through the fog of multiple accounts, it became clear that he was traumatized by the loss of control during the administration of and emergence from the anesthesia.

"They told me it was only oxygen," he said. "They lied. There was a taste to it...I was awake and skinned alive...They said I was a monster when I woke up thrashing." He went on, explaining that in the recovery room "there were 2 people bothering me, man-handling me, asking me questions."

One of his daughters showed me pictures of bruises on his face from ripping off the mask and pulling out the breathing tube. They were visibly upset by the memory of his postoperative combativeness and paranoia. The note written by the orthopedic surgery resident on the day after surgery stated succinctly, "Doing well, had some delirium from anesthesia overnight." Subsequent geropsychiatry home visits attested to intrusive thoughts, flashbacks, and nightmares from his time as a combat soldier in World War II, 65 years in the past.

"It took me months...months to recover," he said.

He was in the mood to reminisce, however, perhaps a willful distraction. He had the floor for at least 30 minutes, during which I spoke about 5 sentences. With every sad story he told there was a happy, humorous one, such as meeting his future wife while on leave in New Zealand during the war,

recalled down to exact dates. And another story:

There we were in New Caledonia. All our supplies went out to replace what sank on [USS] Coolidge, including a lot of food. Well, there were deer on the island. So we took out a truck and a rifle and wouldn't you know we came upon a roadblock in the form of a big steer. We figured it looked enough like a deer. My buddy shot it dead with one shot. We dressed it and loaded it into the jeep. Hardly before we even got back to the mess hall, the officers' cook came sniffing around. He and our captain agreed it was easily the biggest deer they'd ever seen and appropriated it to the officers' mess. Next day the CO [commanding officer] of the whole outfit came by and announced it was the best tasting venison he'd ever had. I heard the farmer got paid a pretty penny for that steer. I didn't get a damn bite.

He delivered this last bit with relish.

When the conversation returned to anesthesia, I read them the record of his hip fracture repair. I explained that on the face of it, the report seemed uneventful. One daughter asked astute questions about his awareness. I explained that although awareness during general anesthesia is possible, it seemed from the record, he'd had plenty of anesthesia during the case and that there is always less at the beginning and end, the periods that apparently had caused him distress. I also explained that most studies report the incidence of true awareness as at most 1 out of thousands of events and that he had none of the established risk factors for it, such as female gender, young age, chronic substance abuse, cardiac and obstetric surgery, and history of awareness.¹

The other daughter wondered why he was so agitated afterward. I recited data on the frequency of postoperative delirium in elderly patients but explained that the range is wide, depending on the study and population, from about 1% in elderly patients undergoing ambulatory surgery to 65% for open aortic surgery.^{2,3} I added that their father had 2 of the strongest risk factors for delirium, advanced age and cognitive impairment.³ Only after airing each

question about the hip surgery in detail were they ready to discuss the eye surgery.

He started that conversation with the right question: "Do I really need it?"

I quoted my surgical colleague's concern. I told him that, should he opt to undergo the surgery, I was confident that this time around his experience would be different from the last.

"If you're okay with it, all you need is some numbing medicine from the surgeon; you won't need any anesthesia from me."

I walked step-by-step through what they could expect on the day of surgery. Maintaining control was of obvious importance to him. He felt comfortable going forward. His daughters intuited that less would be more for a quick recovery.

We then addressed the DNR directive. I acknowledged his absolute right to self-determination and explained that the need for resuscitation is, at times, a consequence of the surgery and anesthesia. I reassured them that our plan made resuscitation and intubation highly unlikely. They also asked to use any interventions necessary to restart his heart if it should stop beating. I documented their decision in my notes and communicated it to the surgical team. We had talked for 90 minutes.

I met the patient and his daughters on the day of surgery in the preoperative holding area. I inserted an IV, applied electrocardiography leads, and affixed a pulse oximeter and a noninvasive blood pressure cuff. In the operating room (OR) we took time to place his 99-year-old joints into, as he said, the "least worst" position. He tolerated the injection of the local by the surgeon perfectly well. We were in the OR for 3 hours, during which he taught me a fair amount about boating and outboard engines among other things. Pathology reported clean margins. He was discharged home soon after and had an uneventful recovery.

PATIENT-FIRST APPROACH

A core competency of the Accreditation Council for Graduate Medical Education for an anesthesia residency is the Interpersonal and Communication Skills program. A comprehensive discussion of communication is far beyond the scope here. But not surprisingly, deficient communication

between physicians and patients can cause emotional distress, significant dissatisfaction among family members, and negative patient judgment of how well we communicate.⁴⁻⁶ These observations are particularly true in our increasingly elderly surgical population, in which both surgeons and anesthesiologists often feel unequal to the task of discussing concepts such as code status.^{7,8}

In our practice and in residency training, the preoperative clinic often is the location where patient/provider communication occurs. Here we consider the latest American College of Cardiology/American Heart Association guidelines, examine airways, review electrocardiograms, and formulate plans agreeable to and understood by our anxious patients and their families. The potent anxiolytic effect of a preoperative visit by an anesthesiologist is well established.⁹ Anxiety about surgery is a risk factor for impaired decision making before surgery.¹⁰ And surgery is traumatic—as many as 7.6% of postoperative patients experience symptoms consistent with PTSD attributable to the surgery, placing it on a par with being mugged (8.0%).^{11,12}

The patient in this case presented several communication challenges even absent his revelation of prior traumatic experience with anesthesia. He was elderly, anxious, and had multiple comorbidities. He had mild cognitive impairment and required a code status discussion. There also were the clinical challenges—navigating a 99-year-old with severe aortic stenosis and a right ventricular systolic pressure > 90 mm Hg through a general anesthetic gave me a sinking feeling.

He was fortunate that the procedure could be done with local anesthesia, mitigating his risk of cognitive dysfunction, including delirium. He also was fortunate in that his anesthesiologist and surgeon had created a collaborative, patient-first approach and that his US Department of Veterans Affairs (VA) clinic had the time, space, and staffing to accommodate an unexpected 90-minute visit. A big investment in communication, mainly my keeping quiet, made the intraoperative management simple. Such is life in an integrated health care system without financial incentives for high-volume care—and another reminder

that VA physicians are blessed to guide patients through some of the most vulnerable and distressing moments of their lives.

Postscript

During the preparation of this manuscript, the patient passed away at the age of 100. His obituary was consistent with what I had learned about him and his family during our 2 encounters: a long successful career in local industry; extensive involvement in his community; an avid sportsman; and nearly 30 grandchildren, great-grandchildren, and great-great grandchildren. But there was one more detail that never came up during my extensive discussion with him and his daughters: He was awarded the Purple Heart for his service in World War II.

Author disclosures

The patient and his daughters consented to the publication of this manuscript. The author reports no actual or potential conflicts of interest with regard to this article.

Disclaimer

The opinions expressed herein are those of the author and do not necessarily reflect those of *Federal Practitioner*, Frontline Medical Communications Inc., the US Government, or any of its agencies.

References

- Ghoneim MM, Block RI, Haffarnan M, Mathews MJ. Awareness during anesthesia: risk factors, causes and sequelae: a review of reported cases in the literature. *Anesth Analg*. 2009;108(2):527-535.
- Aya AGM, Pouchain PH, Thomas H, Ripart J, Cuvillon P. Incidence of postoperative delirium in elderly ambulatory patients: a prospective evaluation using the FAM-CAM instrument. *J Clin Anesth*. 2019;53:35-38.
- Raats JW, Steunenbergh SL, de Lange DC, van der Laan L. Risk factors of post-operative delirium after elective vascular surgery in the elderly: a systematic review. *Int J Surg*. 2016;35:1-6.
- Roter DL, Hall JA, Kern DE, Barker LR, Cole KA, Roca RP. Improving physicians' interviewing skills and reducing patients' emotional distress: a randomized clinical trial. *Arch Intern Med*. 1995;155(17):1877-1884.
- Wright AA, Keating NL, Ayanian JZ, et al. Family perspectives on aggressive cancer care near the end of life. *JAMA*. 2016;315(3):284-292.
- Hall JA, Roter DL, Rand CS. Communication of affect between patient and physician. *J Health Soc Behav*. 1981;22(1):18-30.
- Cooper Z, Meyers M, Keating NL, Gu X, Lipsitz SR, Rogers SO. Resident education and management of end-of-life care: the resident's perspective. *J Surg Educ*. 2010;67(2):79-84.
- Hickey TR, Cooper Z, Urman RD, Hepner DL, Bader AM. An agenda for improving perioperative code status discussion. *A A Case Rep*. 2016;6(12):411-415.
- Egbert LD, Battit GE, Turndorf H, Beecher HK. The value of the preoperative visit by an anesthetist. *JAMA*. 1963;185(7):553-555.
- Ankuda CK, Block SD, Cooper Z, et al. Measuring critical deficits in shared decision making before elective surgery. *Patient Educ Couns*. 2014;94(3):328-333.
- Whitlock EL, Rodebaugh TL, Hassett AL, et al. Psychological sequelae of surgery in a prospective cohort of patients from three intraoperative awareness prevention trials. *Anesth Analg*. 2015;120(1):87-95.
- Breslau N, Kessler RC, Chilcoat HD, Schultz LR, Davis GC, Andreski P. Trauma and posttraumatic stress disorder in the community: the 1996 Detroit Area Survey of Trauma. *Arch Gen Psychiatry*. 1998;55(7):626-632.