Beyond the Call of Duty

In the MICU

Well into my third year of residency in internal medicine, I had run many codes and performed numerous cardiac and respiratory resuscitations. I felt knowledgeable and confident about leading any medical emergency. However, nothing would prepare me for the code that was called in the MICU that night.

"Anesthesia STAT, MICU," suddenly rang throughout the halls. Usually, this "pre-code" signal indicates that a patient needs to be intubated for some form of respiratory failure, which is a simple procedure typically handled by the anesthesia resident. Unfortunately, this patient had extubated himself and quickly became profoundly hypoxic. While I waited for the anesthesia resident to arrive, I reviewed the patient's chart. The patient, a 75-year-old man, was being treated with extensive radiation therapy to the neck for neck cancer and was intubated in the OR using fiberoptic scopes earlier in the day.

When the anesthesia resident arrived, he requested the "difficult intubation cart" from the OR and began working on the patient. After a few minutes, he said, "I can't see the cords!" A few more minutes passed, and the anesthesia resident still could not see anything. At this point, my heart was pounding, and I asked someone to page the trauma surgical resident on call, anticipating trouble ahead. The patient's normal sinus rhythm deteriorated to sinus bradycardia, obviously due to hypoxemia.

Frustrated by the anesthesiology team's lack of success, I told them, "You have another minute to attempt endotracheal intubation, then we must do something else." While the anesthesiology team continued attempts at intubation with the fiberoptic scope, I requested a tracheotomy kit and a scalpel. After another minute, the patient's ECG showed that the sinus bradycardia flattened into asystole. The next decision was obvious. I yelled, "We must trach him now!"

Without a willing anesthesiologist or an available trauma surgeon, I was the only person willing to perform a cricothyroidotomy despite the fact that I had never performed the procedure before. As I stood by the patient's bedside, I wondered if I would be doing more harm than good. Nevertheless, I took an oath to heal the sick, and this man would die if I did not help him.

The radiation therapy to the patient's neck had completely distorted his anatomy. No identifiable sternal notch, cricoid cartilage, or tracheal rings were evident, except for the tip of the thyroid cartilage. I located the patient's Adam's apple and where the sternal notch should be and made a small transverse cut with the scalpel. After placing my finger in the incision and feeling what I thought were tracheal rings, I placed the tracheotomy tube in the opening. I had hoped to see a color change in the attached CO_2 meter, but this did not happen. Instead, dark purple blood flowed like a river onto the bed. I most likely had lacerated the patient's anterior jugular vein. At that point, I doubted my decision to intervene. However, I had to refocus. The only option now was to apply pressure and reattempt placement of the tracheotomy tube.

As I attempted to place the tube, I asked a medical student to perform chest compressions and intermittently ordered a nurse to administer atropine and epinephrine. Once again, the CO_2 meter failed to change color. A senior surgical resident suddenly appeared at the bedside, looking both astonished by and impressed with my efforts. He quickly placed his fingers in the new airway and made another incision. This time the CO_2 meter turned the proper color, indicating adequate ventilation. The patient's pulse oximetry rose and he regained a pulse and normal blood pressure. Emergent plans were made to bring the patient to the OR for revision of the tracheotomy and repair of the lacerated neighboring vessels.

Residents, nurses, and others said I was brave to attempt the tracheotomy. Although there could have been a poor outcome, I truly saw no alternative for saving this man's life. For me, this code signifies the reason I entered the medical profession—to help heal the sick—and reaffirms my decision to become a physician.

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