



Read these firsthand accounts from South Carolina anesthesiologists and some of the things that happen all too often.
Physicians Save Lives When Seconds Matter!

Heart Procedure

We were performing a pacemaker implantation, and I noticed that the pulse oximeter suddenly showed no reading. Upon questioning, the CRNA began to check the cable. The end tidal CO₂ monitor then quickly trended toward a zero reading, which can mean there is no cardiac output. Still, the CRNA said “the sample line must be occluded.” The cardiologist was reluctant to be distracted from his procedure. I loudly expressed my concern and quickly convinced them both by showing them a non-beating heart on the live fluoroscopic x-ray. My intuition was correct that the patient’s lack of a heartbeat was PEA (pulseless electrical activity). The patient was essentially dead. Chest compressions were immediately begun and my pharmacological interventions were successful in restoring a normal heartbeat. The pacemaker was successfully placed, and the patient was able to go home the following day.

Cancer Surgery

We were in progress with a planned removal of a patient's lung for cancer resection. The surgeon identified a malposition of the stapler which partially crossed the main pulmonary artery. The stapler then malfunctioned, and a large hole was torn in this vital blood vessel. The CRNA and I immediately functioned as an incredibly efficient team, with me ordering the clinical plan and us both coordinating administration of medications and checking and very rapidly administering substantial amounts of blood and blood products. It would have been impossible for one person to have done all that was immediately and absolutely necessary to save this patient, especially if I had not anticipated the potential problems and placed large-bore IV access before the surgery. This patient would have had no chance for survival without the presence of a skilled multiprovider anesthesia team.

Life Threatening Complication from Infection

While inducing anesthesia in a patient with sepsis, the patient became increasingly tachycardic. As I rapidly administered IV fluids for the patient and decreased our anesthetic, I noticed the CRNA about to use esmolol, which slows the heart rate. I told them to hold giving the medication and reminded them that a septic patient needs an elevated heart rate to keep the blood pressure in a survivable range and that giving that medication at this time could cause an irreversible spiral downward. The patient needed a fast heart rate to survive, and the CRNA wanted to give medicine to slow it down.

Motor Vehicle Trauma

I was called to the room to assist in oxygen desaturation for a patient undergoing exploratory laparotomy from MVA trauma. Oxygen saturation was 85%, blood pressure was beginning to sag and become less responsive to pressors. While I scanned the vital signs and equipment, I asked the nurse anesthetist what she had attempted so far. She responded that she had increased the tidal volume and O₂ to 100%. I asked if she had checked the breathing tube placement, listened to the lungs, checked the breathing circuit connections, suctioned the airway of mucus, etc. All her responses to my questions were no. The nurse anesthetist assumed it was related to blood loss. I explained, as I performed my checks, that while what she thought was going on was possible, there were still other things that had to be evaluated. It ultimately was an ETT that had migrated to the right main stem bronchus and a loose circuit. When corrected, the patient became stable. No blood products were needed.

Dental Procedure

I was directing a CRNA in the dental procedures room where we provide general anesthesia for extensive dental work needed by typically healthy, but underprivileged children. The first patient that morning was a 4-year-old Hispanic male with no medical problems. The induction of anesthesia and nasal intubation were unremarkable. About 20 minutes after induction, the nurse anesthetist said that the end tidal CO₂ was “a little high”. It was 72 (normal range 35-45mmHg). The nurse anesthetist thought the detector may need to be changed. She had increased the tidal volume and ventilation rate. The blood pressure, heart rate and temperature were normal. After making a few adjustments with no changes, I recognized that this was not a monitor malfunction. I instructed the dentist to halt the procedure because I feared we were dealing with a case of Malignant Hyperthermia. MH is perhaps one of the most rare and dreaded complications of anesthesia. It is a severe reaction to very typical anesthetic agents that causes muscle rigidity, high fever, high heart rate and often death if not quickly and appropriately treated. I called for assistance and began the treatment immediately. I placed an arterial line and large bore IV while I waited for the medications to arrive. A team of 3 CRNAs, several nurses and I worked for 2 hours administering dantrolene and replacing electrolytes to reverse the course of the boy’s reaction. I was also supported by an expert anesthesiologist from the National Center for the treatment of MH via telephone so I could ensure we were delivering the proper care. Thankfully, the outcome was good, and the child was transferred to our PICU, extubated, and discharged the following day. Physician-led treatment and the Anesthesia Care Team approach was vital in saving this child’s life. This was not a complicated procedure. It could have taken place at any dental office, surgery center, or small hospital in South Carolina.



Emergency Heart Case

While in an emergency heart case, the surgeon called out that there was “now a hole in the heart.” As the pressure drifted to the lower end of normal, the CRNA was grabbing for a medication to increase the blood pressure. I told the nurse anesthetist to stop and explained that in this scenario we need a lower blood pressure to decrease the amount of blood coming out of the hole so the surgeon could identify it and repair the hole. Proper management of this rare circumstance was lost on the CRNA.

