MIND TO MIND

Creative writing that explores the abstract side of our profession and our lives

Carol Wiley Cassella, M.D., Editor

Run Aground

Edwin T. Ozawa, M.D., Ph.D.

Years ago when I became a newly board-certified anesthesiology attending with some extra money to burn, I used to do quite a bit of sailing. I belonged to a sailing center directly on Boston Harbor, and for an annual membership fee was entitled to rent the center's sailboats and cruise around the Harbor, as I had passed their courses and certifications proving that I was competent enough to handle the sailboats on my own.

One weekend I took a boat out with another anesthesiologist who belonged to the sailing center. The boat was a J/24, a keelboat which is relatively small and easy for two people to sail, but also has the advantage of having a small gas powered outboard motor. Both of us were fairly experienced sailors and familiar with the J/24, so we expected an easy and relaxed outing.

We fired up the outboard motor and pulled away from the dock. The weather was perfect, with beautiful sunshine, blue skies, and a stiff enough breeze to carry the boat easily. After motoring away from the mooring area into the main traffic channel, we cut the engine and hoisted the sails. The exhilaration and feeling of peace that I love about sailing immediately returned as the boat glided out of the inner harbor.

Once in the outer harbor, we chose to turn south down a less traveled channel that would take us between Spectacle Island and a mud flat extending from Castle Island, the site of a War of 1812–era fortress. Spectacle is a man-made island that was built from the dirt excavated

From the Tufts University School of Medicine, Lahey Hospital and Medical Center, Burlington, Massachusetts. edwinozawa@gmail.com

Accepted for publication February 3, 2016.

Permission to reprint granted to the American Society of Anesthesiologists, Inc., and Wolters Kluwer Health, Inc., by copyright author/owner. Anesthesiology 2016; 125:414-6

during the "Big Dig," the massive public works project that removed the elevated interstate highway cutting through the middle of Boston and sunk it deep underground.

This channel I described is marked by colored buoys on both sides. Once we entered the channel, we immediately encountered our first problem. No wind. Spectacle Island is tall enough to block the wind flowing from just the right direction across the harbor. Our second problem was the unpredictable current appearing just then as the tide began changing from ebb to flow. We happened to be caught in one current that carried us sideways, perpendicular to the channel towards the mud flats. With no wind, the boat completely lost forward motion. With no water flowing past the rudder, we also lost the ability to steer. We began to drift helplessly.

The solution to the "no forward motion" problem is simple: run the outboard engine. I scrambled to the front of the boat and dropped the sails. My friend set the choke on the engine and primed the fuel line. He pulled the starter cord. Nothing happened. We exchanged nervous glances as feelings of dread began to quickly rise. My friend frantically repeated the process again and again but the engine refused to engage.

I leapt into the cockpit and examined the paper nautical chart, marked with water depths, and noted from our relative position that we were heading into a shallow area. The current was carrying us towards Castle Island, but between us and the shore lay an ominous shoal of rocks. I focused on the depth gauge as visions of dollar signs for the potential damages flashed in my brain. It read "15 ft...12 ft... 8 ft...5 ft... 2 ft...." Then came a sickening scrape and shudder as our keel dragged over rocks. The boat came to rest, with a slight list.

We looked down and saw the dark rocks immediately below us through the crystal clear water. The boat didn't seem to be in any imminent danger. Given that the tide was starting to flood, it seemed reasonable to anchor and wait for the rising waters to lift us off.

Fortunately we had brought a large plastic cooler filled with sandwiches and beer. It seemed like a perfect opportunity to bring everything out, and we made short work of our supplies. Despite our predicament, a great feeling of calm and contentment came over us. An hour later, the boat gave a little shudder and floated free. My friend strode over to the motor, hoping to start it so we could navigate out of the shallows. And wouldn't you have guessed that the engine sputtered to life with only one relaxed pull of the starter cord? Shaking our heads in amazement, we motored back into the main harbor channel and inspected the bilge, whose unchanged water level indicated to us that the hull had not been breached. We hoisted sails, cut the motor, made our way up the main channel and continued our cruise in deeper waters, determined to salvage the remainder of the beautiful day without sacrificing safety again.

This misadventure reminds me of many situations in anesthesia and medical practice. Conducting a routine anesthetic is much like setting off on a fabled "three-hour tour." And like Gilligan's experience, potential pitfalls and unforeseen

hazards can materialize at any moment. An important thing we can do under any circumstance is to double-check our equipment to ensure that it will work properly when disaster strikes.

Training and familiarity with rare events is also extremely important. I was very comfortable sailing a boat in deep waters with all equipment functioning normally. What my training lacked, however, was how to deal with the unexpected. Neither I nor my co-sailor had ever been in a situation of helplessly drifting towards rocks. I am sure that some paragraph in my sailing manuals addressed this exact situation in detail, but damned if I could recall what it said. Like numerous other emergency situations that occur on the water, I had little opportunity to calmly practice managing them in advance, and therefore to react swiftly and certainly in order to avert a bad situation. Some practice in a simulated environment and a few emergency checklists could have gone a long way towards fixing this deficiency. It is also interesting that I relied on the nautical chart and depth gauge to avoid exactly this event, yet both of these tools merely confirmed that we were in trouble and did nothing to prevent it.

At work, I often think back to this sailing adventure when observing the dials and screens, resplendent with blips and colorful wiggly lines. Those pieces of electronic equipment help monitor a patient under anesthesia, assuring me that everything is going well and alerting me when things go awry. I can only hope that these physiologic monitors will provide me with enough of an advance warning to keep the patient from coming to harm, but as this story illustrates they may only demonstrate too late that trouble has already arrived.

Ultimately, the best thing we could have done was to never tempt the fates to begin with, to stick with the tried-and-true and not deviate from the confines of the main channel. This approach can be wholly unsatisfying to the curious and restless mind. It is the basic impulse of high achievers to push past the boundaries of comfort in order to improve and gain confidence; but perhaps where lives are concerned, it is better to stay between the buoys.