

See the Harm

Giancarlo Buonomo, B.A.

The alarm rang in the newborn nursery around 4:30 on Friday afternoon. I'd already learned that an alarm in a hospital can be like a carbon monoxide detector at home: everyone first assumes it's a mistake and moves to mute the annoying ringing. This monitor was white and plastic and stuck to the wall in the physician workroom. The attending physician's eyes narrowed as she scrutinized it, and then widened. "It's a code blue in one of the mother-baby rooms." Our chair legs screeched as we rushed out of the room.

The mother-baby unit was a 30-second walk away, and I matched the attending's stride as we moved through the fluorescent-lit hallways. "Babies stop breathing, adults stop beating," I recited to myself, trying to summon some forgotten module on basic life support. "The third-year medical student's job during a code is... I have no idea."

The attending lurched around the final corner, as if being pulled by an invisible dog. A group of nurses was already in front of the room in question. They were all laughing. Apparently, a member of the cleaning staff had bumped the code-blue button with her elbow as she vigorously mopped the floor.

The attending laughed as well and then went back to the workroom. I stood there for another moment, filled with disappointment.

On my walk home that evening, I lambasted myself. "You're annoyed that the code blue *wasn't* real? You actually were hoping that

an infant had stopped breathing?" I explained it away as a one-off, a Friday frustration coming at the end of a long, tedious week of wet diapers and soggy burritos during lunchtime didactics.

But during the rest of my third-year rotations, I had similar experiences. The young woman who came into the family medicine clinic with headaches had no red-flag symptoms of a brain tumor. The post-op patient's scan did not reveal a pulmonary embolism. I asked parent after parent in the emergency department if their feverish child had a stiff neck and photophobia, while said child somersaulted around the exam room. Every time, I was ashamed that relief was not my first emotion.

In the preclinical years, medical students are exposed to a massive amount of new, exciting, and almost completely abstract information. In that abstractness, there is comfort — and callousness. You can invent the most tragic of patients — a pregnant woman with a CD4+ count of 25 and disseminated *Mycobacterium avium* complex infection who's on a ventilator — just to quiz your classmates on arterial blood gases.

Then comes third year, and it's as if after a lifetime of listening to baseball on the radio, you suddenly take center field. It's time to actually see and start treating those diseases that have only existed as patterns of words and numbers. Which leads to the central dilemma of the medical student: because you want — and need — to learn, you have to hope that enough people get sick, with

sufficient frequency, with varied and sometimes terrible illnesses. In order to do no harm, you first need to see some harm.

Of course we don't *want* someone to have acute mesenteric ischemia, but since it's something that happens to people, we should learn how to recognize and treat it. I'd answered hundreds of questions about pancreatitis in my first few years of medical school, but until I saw my first patient presenting to the ED with abdominal pain rippling into his back, the phrase "elevated lipase" remained little more than a piece of trivia.

I'm not an unwilling participant. Real pathology feels like a reward for slogging through so much imaginary pathology in my preclinical years. And I find it interesting. How could I not? In a little more than a year of clinical training, I've seen a patient with neurosarcoidosis whose feet flapped when you jerked on them. I've felt the hard tip of a spleen in a man with a white-cell count of 150,000. I've had patients test positive for tuberculosis, syphilis, malaria, leprosy. I've walked into a trauma bay and resolved to never, ever ride a motorcycle. I get to witness, every day, the extraordinary capacity of the human body to be hurt and to be healed. There are few days when someone shows me a CT scan or a lab value and I don't say, "Cool!"

Every time I say it, though, I have to immediately correct myself: "Well, not cool for them." It can be so thrilling to finally see real disease that I forget that the patient is also real. That myoclo-

nus was amazing to see, yes, but neurosarcoidosis had also taken a young woman who used to demolish CrossFit workouts and made her reliant on a nurse to wipe herself. Caring about the pathophysiology and not the patient is wrong. But you can't care for the patient without caring about the pathophysiology.

One of my most memorable patients on my medicine rotation was the 80-something-year-old Mr. R. He had a thick Boston accent and told stories about being a Marine in Korea, like when he and his buddies made skis out of ammo crates and slalomed down the hills around the base, artillery booming in the distance. It was hard to imagine Mr. R. as a virile young man. Now his belly hung over his knees, and his shins hung over his ankles. His room smelled like death, probably from the chronic, weeping ulcers all over his legs.

I liked him as a person and loved him as a patient. I could not have picked a better learning case. His legs and stomach had been swelling for months after he'd given up taking his furosemide, and when I pressed on his abdomen, it felt like a water bal-

loon. When I listened to his heart, the beat sounded like a pinball machine, but his lungs were clear. We drained 9 liters of fluid with a high serum ascites-albumin gradient and a high protein level from his belly. But then his liver-enzyme and bilirubin levels rose, and we sent off labs for hepatitis B and Wilson's disease. We gave him so much torsemide that it caused an acute kidney injury, but then he started retaining urine. He became confused, and we worried that a blood clot had embolized to his brain. It was as if he woke up every day, flipped through *Harrison's*, and said, "I think I'll have that today."

After 2 weeks in the hospital, though, Mr. R. was ready to go home. On his discharge summary, I wrote him up as, "Right heart failure secondary to undiagnosed pulmonary hypertension, cardiorenal syndrome, cardiac ascites, congestive hepatopathy, and afib with hospital course complicated by UTI and hypoactive delirium." I went to give him his discharge papers and say goodbye. He nodded as I went over his long list of medications and follow-up appointments. I finally asked him something that I'd been wonder-

ing about for the last 2 weeks. "You know, Mr. R., you came in with a lot of fluid buildup. You must not have taken your water pills for a long time. Is it OK if I ask why?"

He stared directly at me. "My wife died of Alzheimer's about 6 months ago," he said. "That was a pretty horrible thing to watch. I guess after she passed, I just sort of stopped caring whether or not I lived."

"I'm so sorry," I said. "If we could set you up with an appointment to talk about this with a professional, would you like that?"

"Yes, actually. I think it'd do me a lot of good."

After years of school and hundreds of practice questions, that was the first day I really felt like I understood heart failure.

Identifying details have been changed to protect the patient's privacy.

Disclosure forms provided by the author are available at NEJM.org.

From the Boston University Chobanian and Avedisian School of Medicine, Boston.

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Double Take Video: Led Astray



This video discusses the differential diagnosis for a man presenting with persistent abdominal pain, fatigue, and anorexia with weight loss and reviews how it evolves with new clinical findings.

