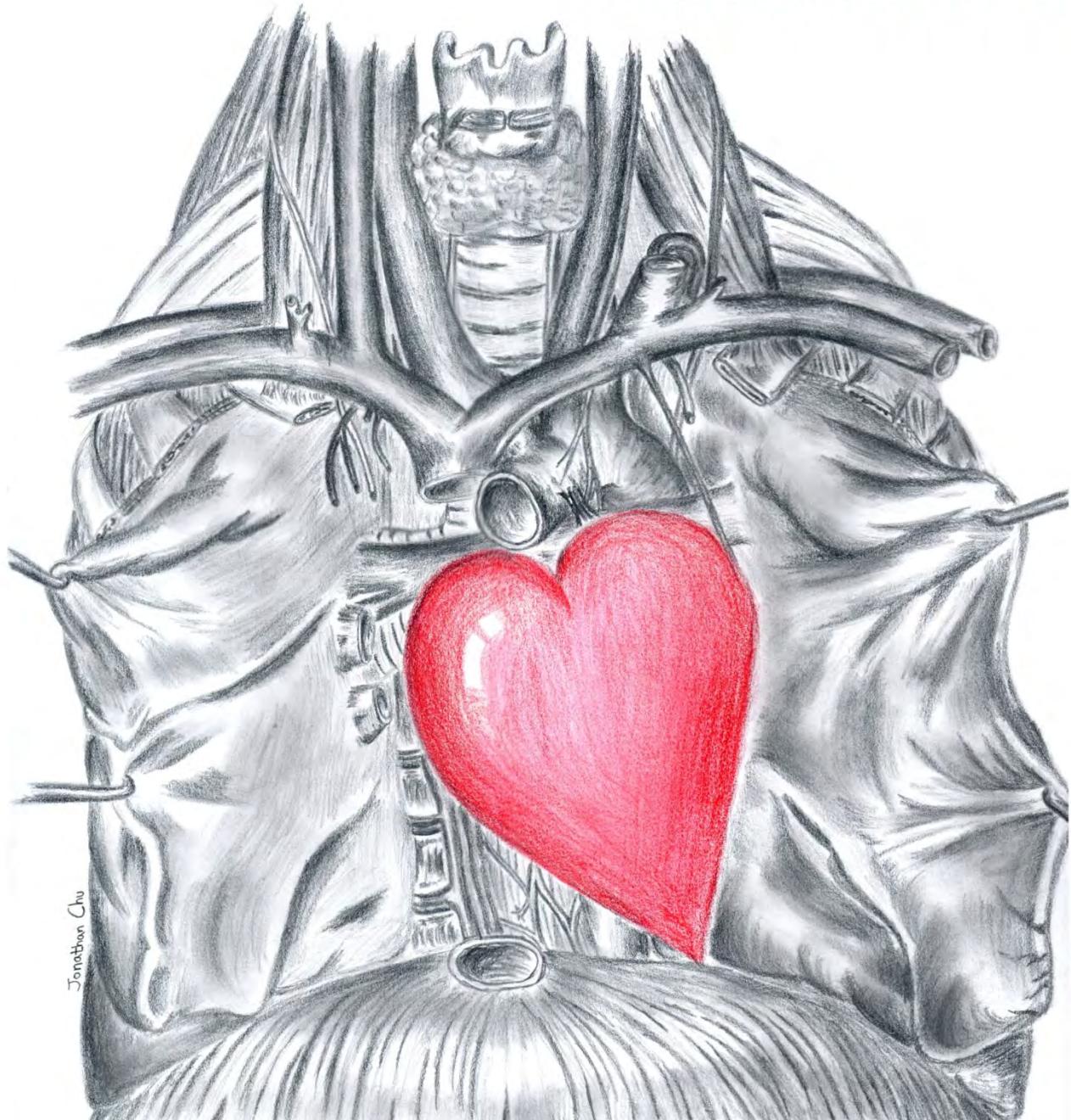


Case Files

Medical Humanities

Jonathan Chu



Introduction

Often, when medical students are being taught, novel concepts and disease processes and treatment algorithms are introduced in the form of clinical cases. Medical educators have long known that large amounts of information can be more readily assimilated when placed in the context of a patient's story; it has more relevance, more bearing, more meaning, and thus it simply sticks to the memory more effectively.

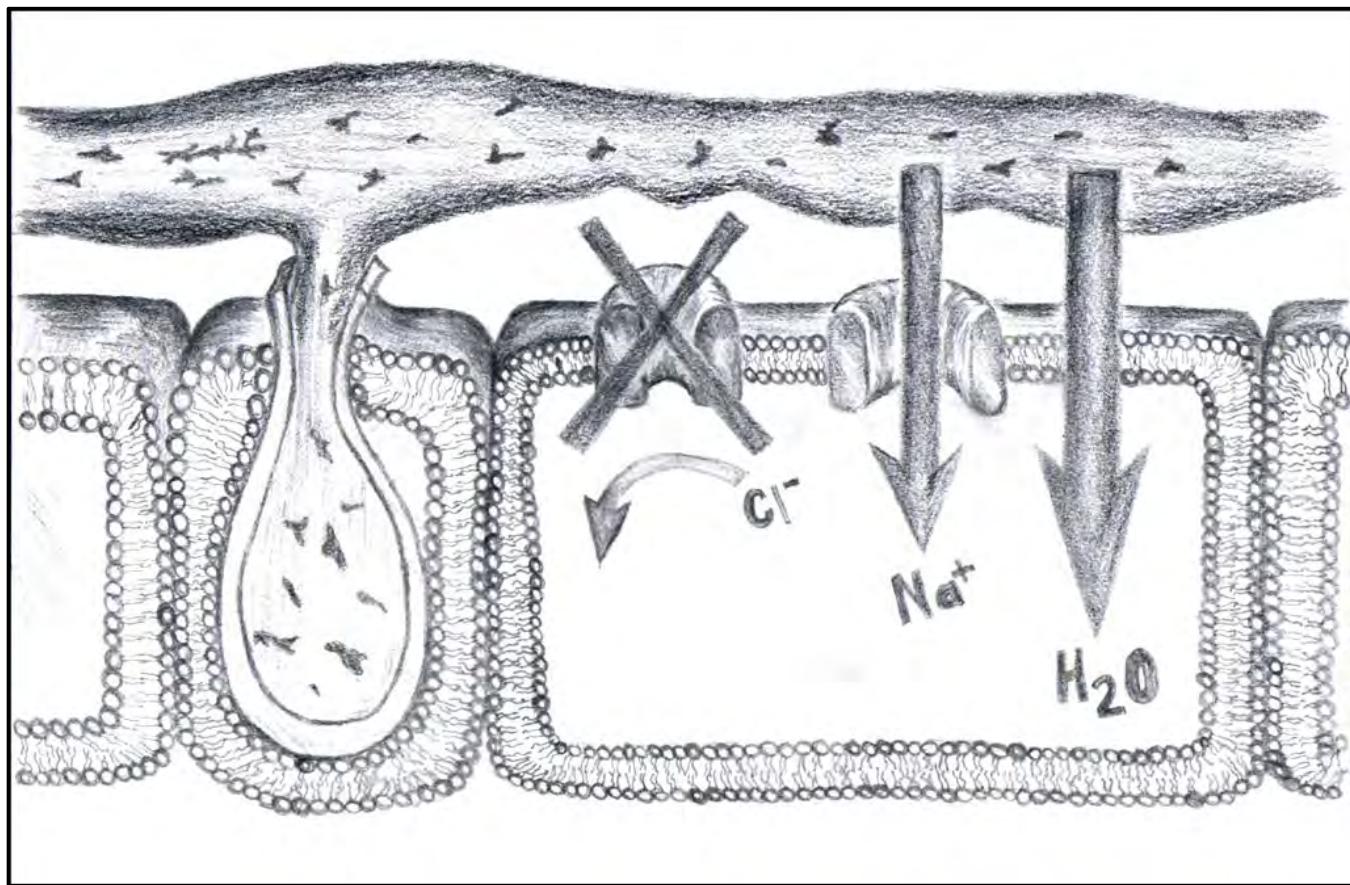
In many ways, I feel that the overall experience of medical school can be best understood in the same way. Certain patients stick out in my memory like beacons; their stories are often heartrending, haunting; other times they are humorous, but all of them will stay with me forever. I have learned from every patient I have ever met; many times the lessons are pragmatic—an atypical presentation of pulmonary embolus, the dull percussive sound of a pleural effusion, the stark catch of a spastic muscle—but many of the lessons are not strictly confined to medical knowledge and are thus not as easy to articulate; many of these patients have taught me about the experience of illness, about the value and transience of wellness, and have also allowed me to learn about myself as a clinician.

Here, I will share some of the stories and images that have affected me most—a glimpse into the lives of the incredible patients and clinicians I have had the privilege to know.

Case 1. A 21-year-old female admitted to the Hershey Medical Center due to an acute exacerbation of cystic fibrosis.

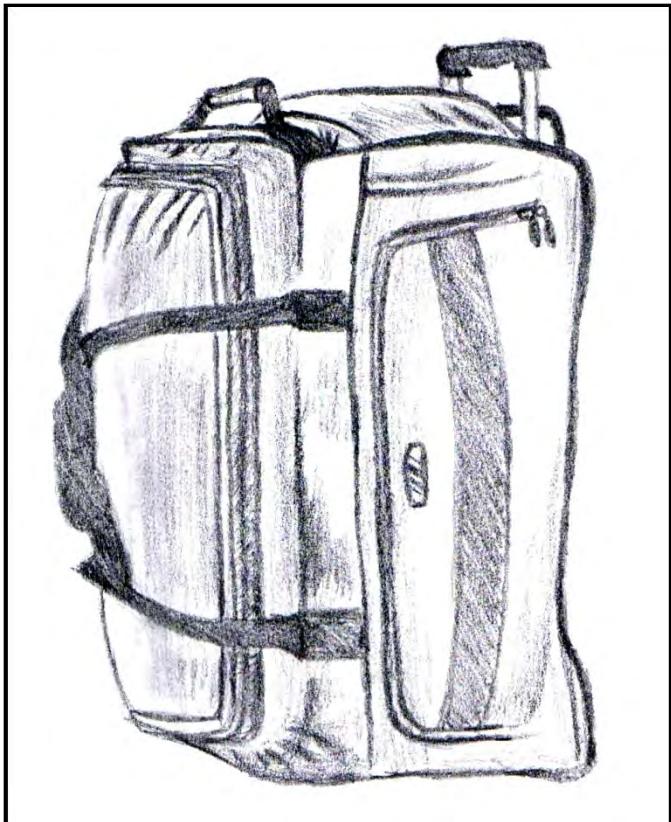
We spent the vast majority of our first two years of medical school memorizing facts from PowerPoint lectures and textbooks. You would find it difficult to believe just how many diseases exist for every organ system—how many enzymes, proteins, and genes that could possibly malfunction within the human body. We came to dread each lecture packed full of diseases named for narcissistic physicians who had been dead for more than a century, the letter-number designations of important mutations, and the elaborate biochemical pathways of deranged cells. Most of these facts held little meaning to us, and often times I worried more about being able to simply retain enough of the information to pass the next exam, rather than what the implications were for my future patients.

For example, cystic fibrosis is a classic disease that is taught to all medical students early on in medical school. Before reaching my clinical years, everything I understood about the disease could be summed up in this illustration:



Patients are born with a mutation in the phenylalanine 508 position, causing the production of a defective CFTR protein, which in turn leads to a buildup of dehydrated mucous in the lungs. That probably doesn't mean much to you; it didn't even mean that much to me either; it was simply something I committed to memory.

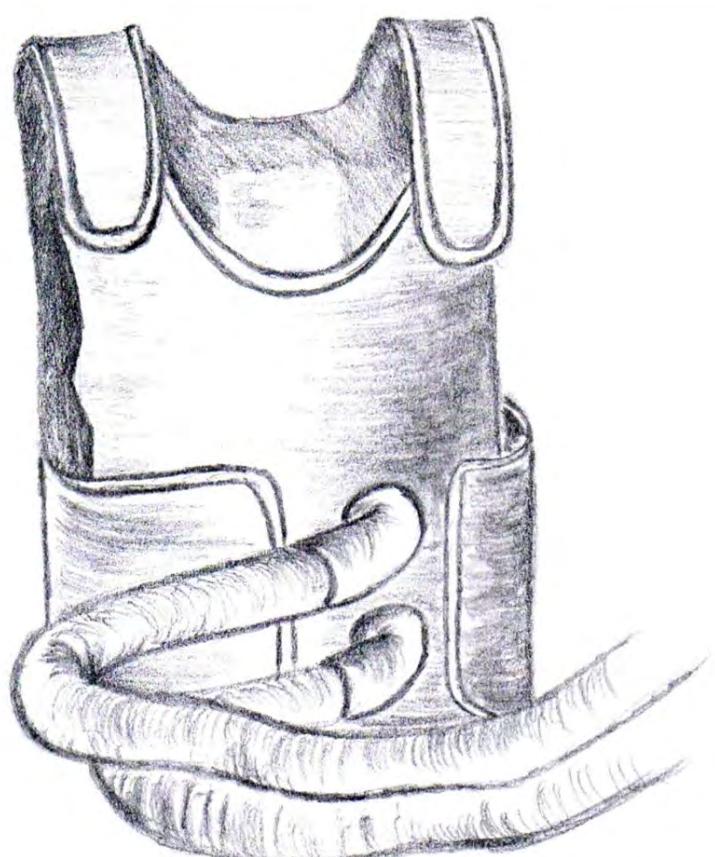
Then, early on during my third year, I met my first patient with cystic fibrosis, and everything changed.



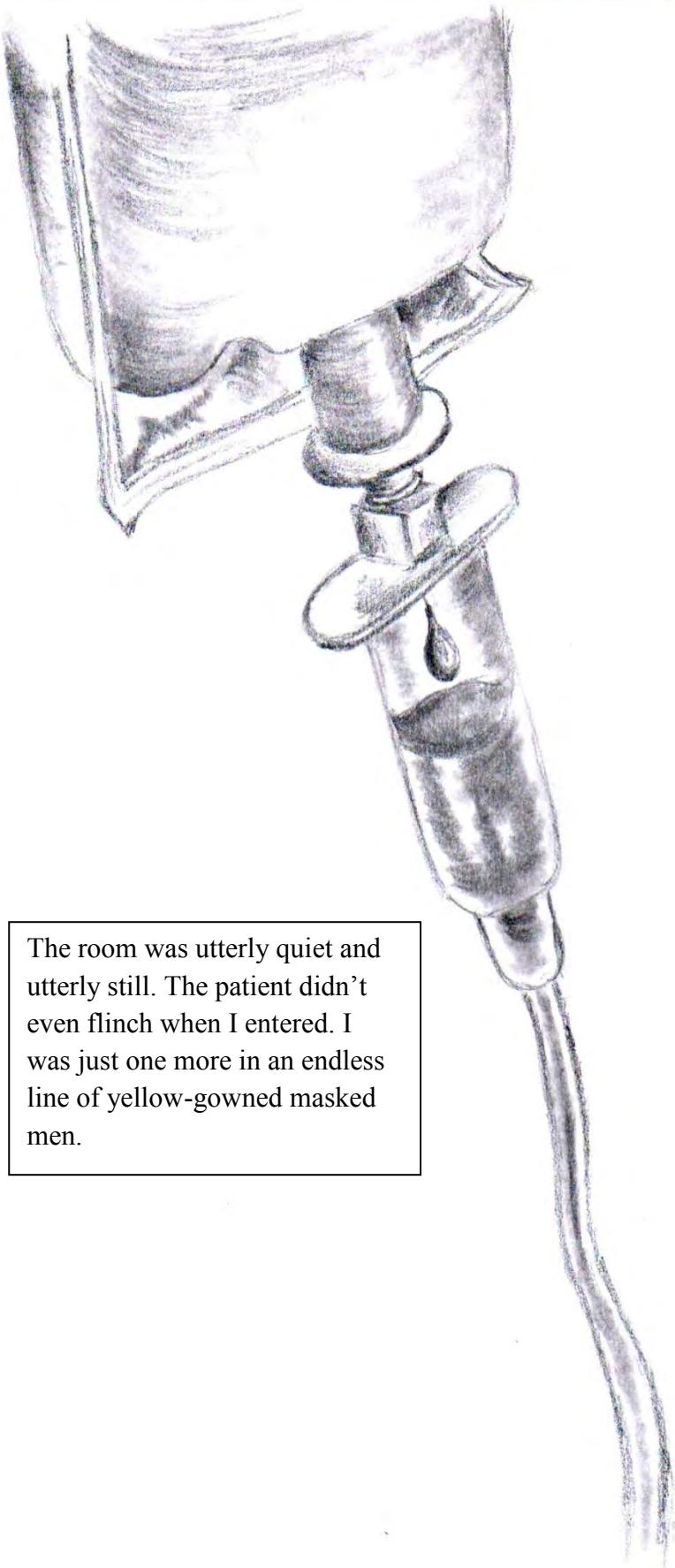
The first thing I noticed when I entered her room was the massive suitcase tucked into the corner. I had never seen a patient do this before, as most people do not anticipate the onset of illness, much less think to pack a suitcase to bring with them upon admission. I immediately understood that this was a patient very accustomed to hospitals, and was used making long stays.

The room was dark, curtains drawn, only a few slivers of light rippling over the bed.

I soaked in the details of the room, one by one.



A pneumatic vest sat beside the sink. It was something patients would wear once or twice a day; when activated, it would rhythmically pump with air to beat patient's chest, breaking up the thick secretions lodged within their lungs.



The room was utterly quiet and utterly still. The patient didn't even flinch when I entered. I was just one more in an endless line of yellow-gowned masked men.

A medley of powerful antibiotics hung at her bedside. It was the first time I had seen some of them used; these were the medications reserved only for cases of highly drug-resistant bacteria.

How many times had she been treated in the past?

What kinds of pathogens were brewing within her lungs? Only the progeny of organisms that had survived rounds and rounds of conventional antibiotics.

I suddenly understood why everyone who walked into the room needed to wear yellow gowns, gloves and masks...as impersonal as those things made the interaction...

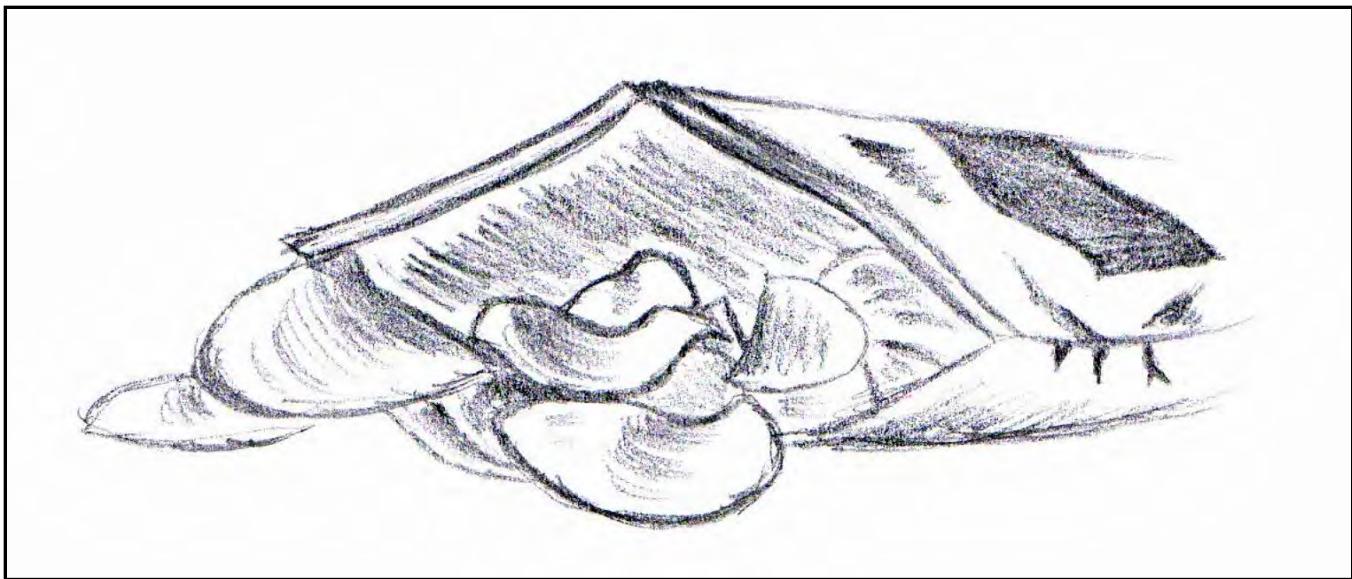
The only motion in the room was the steady

drip

drip,

drip,

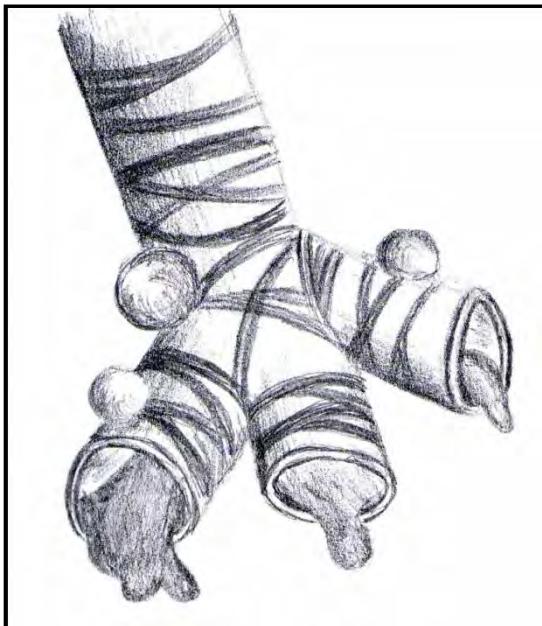
of the intravenous line, feeding those potent medications into her veins.



A collection of high-calorie snacks littered the windowpane and the remainder of the room. Everywhere, I could see half-eaten bags of potato chips and candy wrappers, the remnants of milkshakes. From gleanings the chart beforehand, I knew that she was a nutritionist who saw her almost daily; since cystic fibrosis patients have such difficulty absorbing nutrients, it was a medical imperative to make sure that she didn't lose too much weight during this exacerbation.

Still, in spite of how this girl ate, she was one of the smallest people I have ever met. I had read about the malabsorption syndrome that often accompanies cystic fibrosis during my first two years, but I was shocked by how tiny she was. I couldn't get over how she was nearly my age, and yet looked to be no more than a child.

She didn't speak much at first. When I told her that I was the new medical student who would be taking care of her, she told me that she wasn't feeling much different than yesterday and asked if I needed to listen to her lungs. She knew the drill well.



Her lungs were some of the worst I had ever heard up until that point. They were crackly and wet throughout.

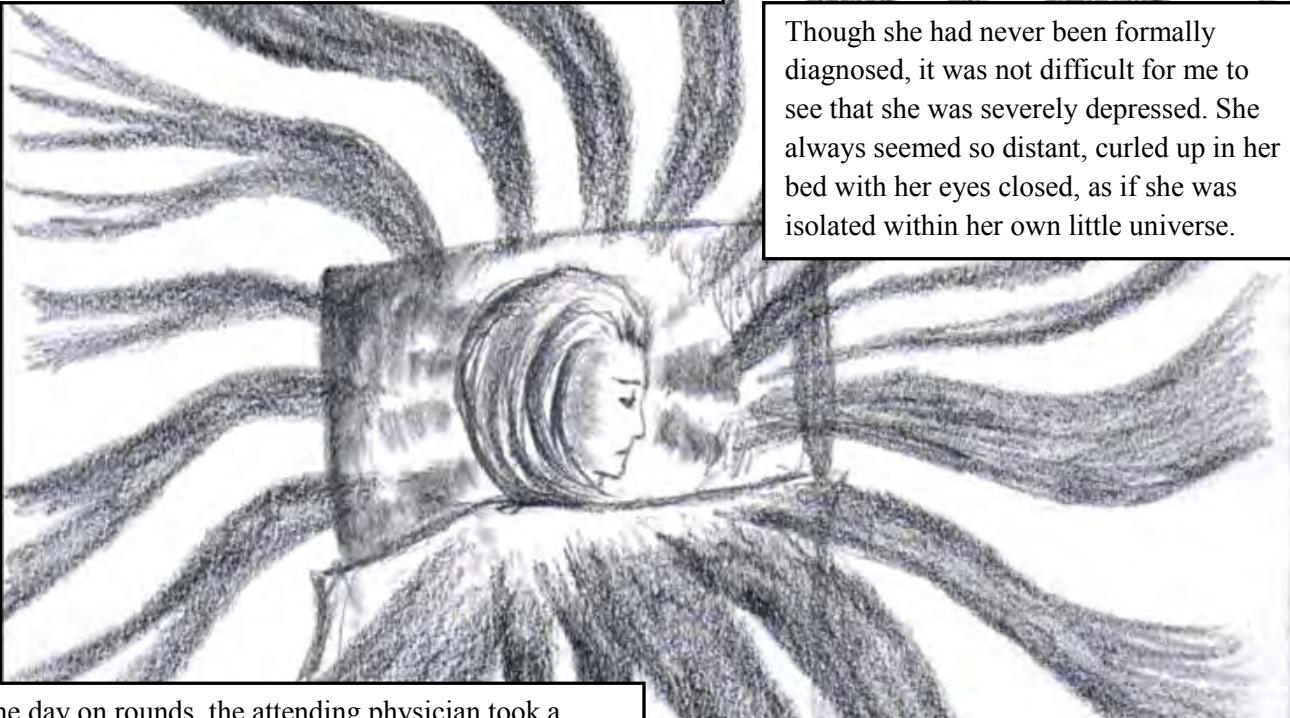
Every bad sound a doctor could think of:

rales, rhonchi, wheezes,

I heard them all. I could almost picture the gunk built up throughout her lungs as she drew each deep breath for me.

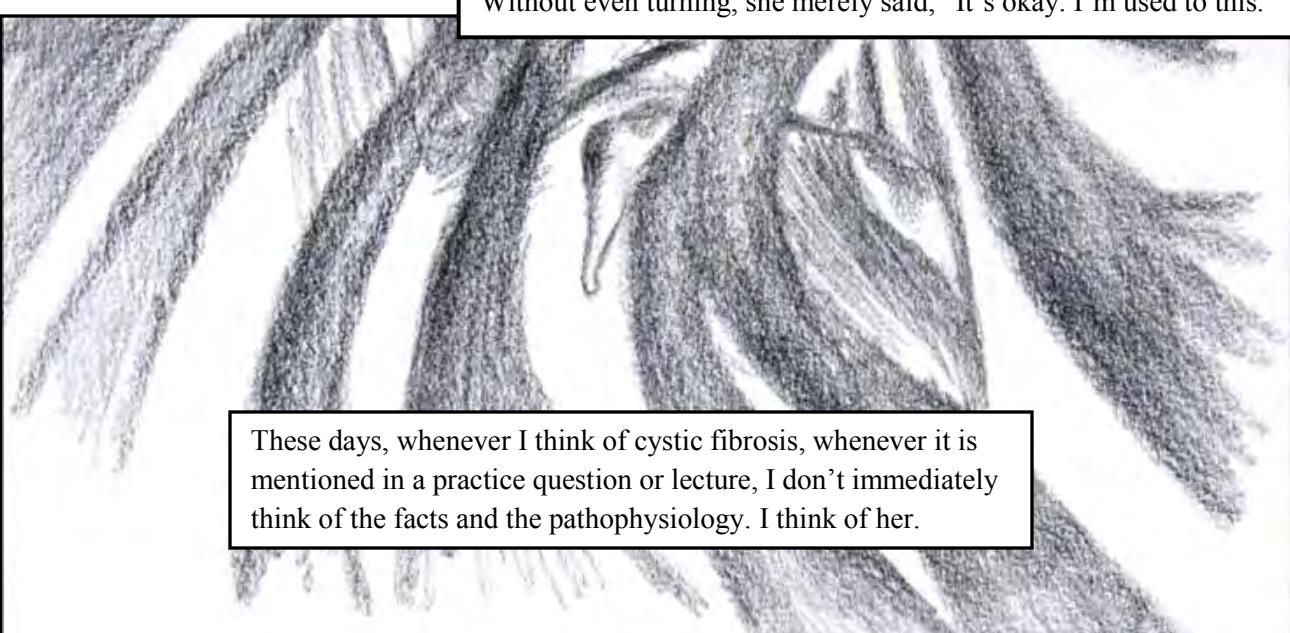
I wondered: *how does someone live day to day with lungs like this?*

Lungs scarred by a lifetime of infections...



Every day I learned more about who she was as a person. I learned that she had a love for animals and had wanted to study to be a veterinarian, but had never been able to even finish college due to her failing health. It was sobering to think that one tiny mutation affected every facet of her life, and was ultimately going to claim her life.

Though she had never been formally diagnosed, it was not difficult for me to see that she was severely depressed. She always seemed so distant, curled up in her bed with her eyes closed, as if she was isolated within her own little universe.



One day on rounds, the attending physician took a pause from asking his usual questions, and then sighed, shook his head, and muttered, "I know you're sad. I understand. This is no way for a young person to live. You should be out seeing the world."

Without even turning, she merely said, "It's okay. I'm used to this."

These days, whenever I think of cystic fibrosis, whenever it is mentioned in a practice question or lecture, I don't immediately think of the facts and the pathophysiology. I think of her.

Case 2. A 3-year-old female with healing fractures in several ribs, both upper extremities and pelvis, as well as multiple bruises and abrasions over the face and torso.

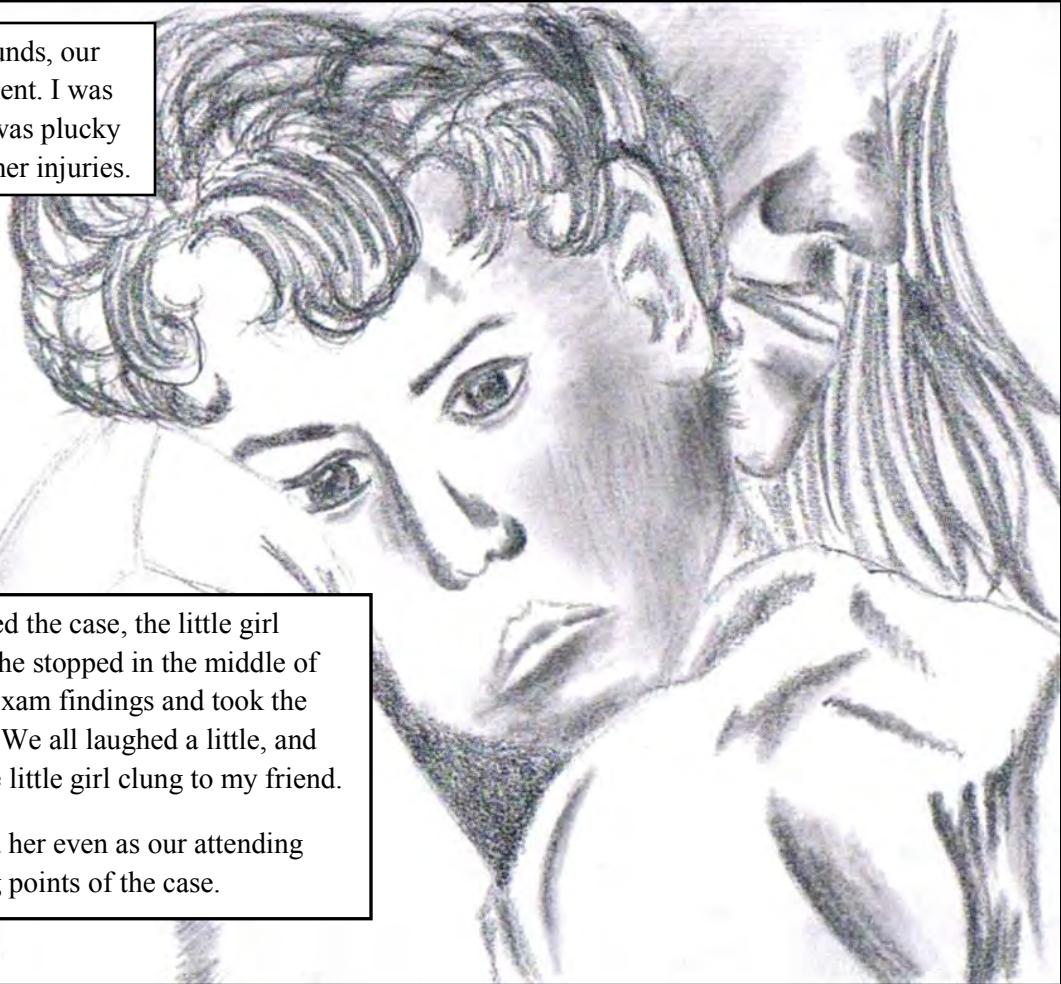
One night during my pediatric rotation, I sat down to have dinner in the cafeteria with a good friend and classmate. It was our usual routine, but that night I knew something was wrong when I saw her; I had never seen her so upset. At first, we ate in silence, but when I finally inquired about what was bothering her, she nearly broke into tears.

It turned out that she had just admitted a little girl from the emergency department who had been terribly abused. "They even think this girl may even have a pelvic fracture. Can you believe that? You're not supposed to see that except in car crashes. *Honestly, who the hell could do this to a child?*" She went quiet for a moment, then added, softly, "You know, I don't ever regret going into medicine, but sometimes...the lows can be really low. Honestly, if I had done anything else, I wouldn't have to see things like this."

The next day during rounds, our entire team saw the patient. I was startled to see that she was plucky and smiling in spite of her injuries.

As my friend presented the case, the little girl reached out for her. She stopped in the middle of reading the physical exam findings and took the patient into her arms. We all laughed a little, and then grew quiet as the little girl clung to my friend.

She continued to hold her even as our attending reviewed the teaching points of the case.

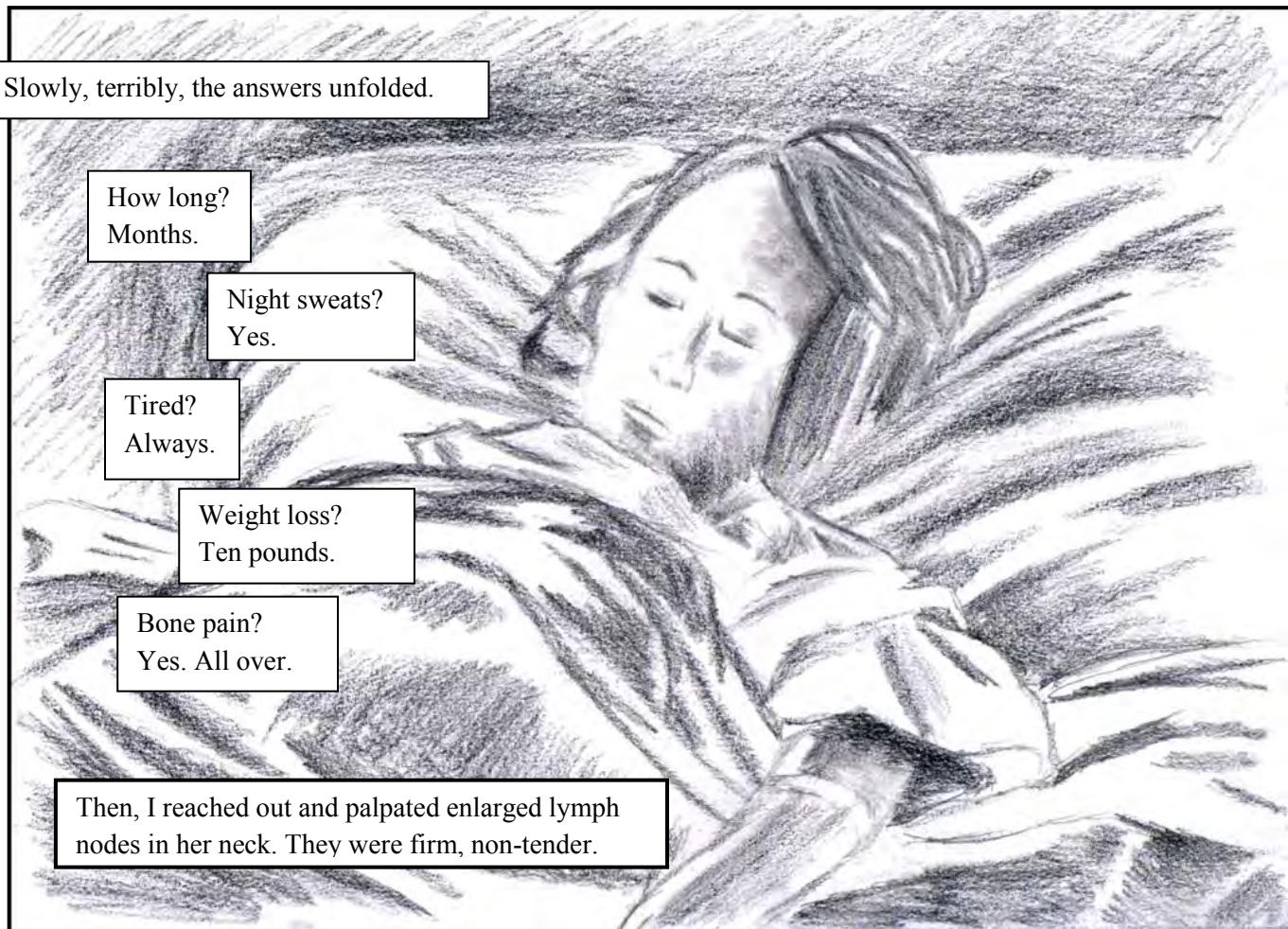


It wasn't difficult to see that this child had been starved for affection, and the image of my friend holding her patient was one the saddest and most beautiful things I have ever witnessed. My friend paused from rocking the girl for a moment, and glanced down at the girl with a heartbreakingly expression in her eyes that seemed to say, "I wish I could take you home and adopt you." It seemed to say, "I wish I knew what was going to happen to you from here onward...but I know that things are going to be better."

Case 3. A 9-year-old female presenting to the emergency department with anemia and fatigue.

One night during my pediatric rotation, my supervising resident was swamped and asked me to see a little girl who had just arrived to the emergency department. He didn't know much about her beyond the fact that she was severely anemic and sent me to find out more.

Her entire family was in the room as I entered. I introduced myself to each of the anxious adults and then made my way over to the patient. She was the palest little girl I had ever seen in my life. Her skin had a ghostly tone, as blanched as the sheets around her. She slowly opened her eyes when I sat down on the edge of the bed. She asked me about the Snoopy doll I had in my white coat pocket, and I smiled and gave it to her before I asked my questions.



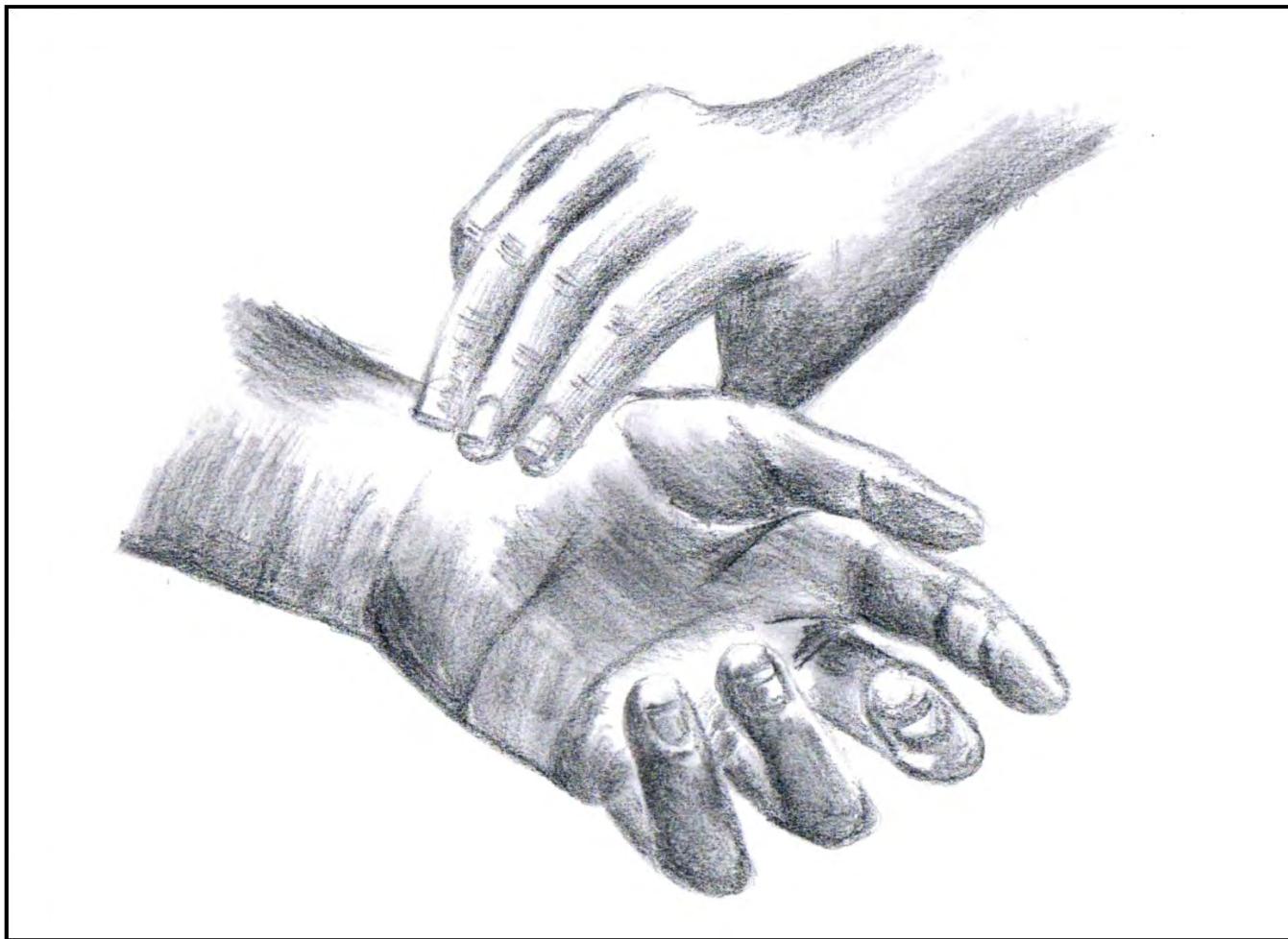
I knew then that the girl had leukemia. The blood and bone marrow would have to be examined under microscope to give a definite diagnosis, but from the story, I knew. The family looked on, perplexed and worried. One of them asked if she had an infection. I didn't know what to say, and I sat speechless for a few moments. Before I could even open my mouth, the resident entered the room and announced that the girl would have to be transferred to the Children's Hospital in Hershey. The family asked a storm of questions, and the resident told them that more tests would need to be run before any diagnosis could be made. Sitting there in that emergency bay, I suddenly came to understand the greatest disparity in power between clinician and patient. I knew, and they did not know.

Clinical Pearl:

Of all of the parts of a patient encounter, my favorite is the physical exam, by far.

It wasn't always that way. In the beginning of medical school, we all feared the awkwardness of the exam component. In what other situation does one violate a stranger's personal space after only a few minutes of conversation?

However, over time, during one's medical education, one comes to gradually realize its value as an information-gathering tool. In the beginning, most students merely go through the motions, not quite sure whether the sounds they hear through their stethoscopes are abnormal, not quite sure how the muscle twitch elicited by a reflex hammer should be graded. However, as my advisor once said to me during my first year, after you listen to a thousand "normals," you begin to appreciate anything out of the ordinary, and soon you have what people would call "clinical acumen."



As I grew practiced, it became less of an awkward ritual and more like a choreographed routine; I came to fully appreciate the beauty of a strong pulse beneath my fingertips, the smooth sound of a deep inspiration, and the hollow tympany of percussion over the belly. Over time, I realized that the physical exam was useful not only for data gathering, but for helping me connect with my patients. Often, I saw that patients came to trust me more after a thorough exam, even if I found no abnormalities, as I had been able to communicate my concern for them through touch in a way that isn't always possible through words alone.

Case 4. A 68-year-old diabetic male admitted for pre-septal cellulitis, clinically improving on a regimen of IV antibiotics.

While on my internal medicine rotation, I was paired with a friend who was known to be quite a character. He was brash, irreverent, and had a daily habit of entertaining our team with off-color jokes—when our attending physician was not listening, of course.

Every day for more than a week, he rounded on good-natured gentleman who was being treated for a severe eye infection. Over time, the two grew quite close.

Then, one night, the patient died suddenly.

The next morning, our attending physician pored over the patient's lab results, trying to understand what had happened. There were no answers. In fact, we never determined the reason.

My friend had been sitting quietly for a long time.

Then, suddenly, he took off his glasses and started to weep.

"I'm sorry," he said. "I just don't know what's come over me."



Then our attending, a tiny woman who was half his size, gathered him up into her arms. Like a mother, stroked his hair and told him that it wasn't his fault.



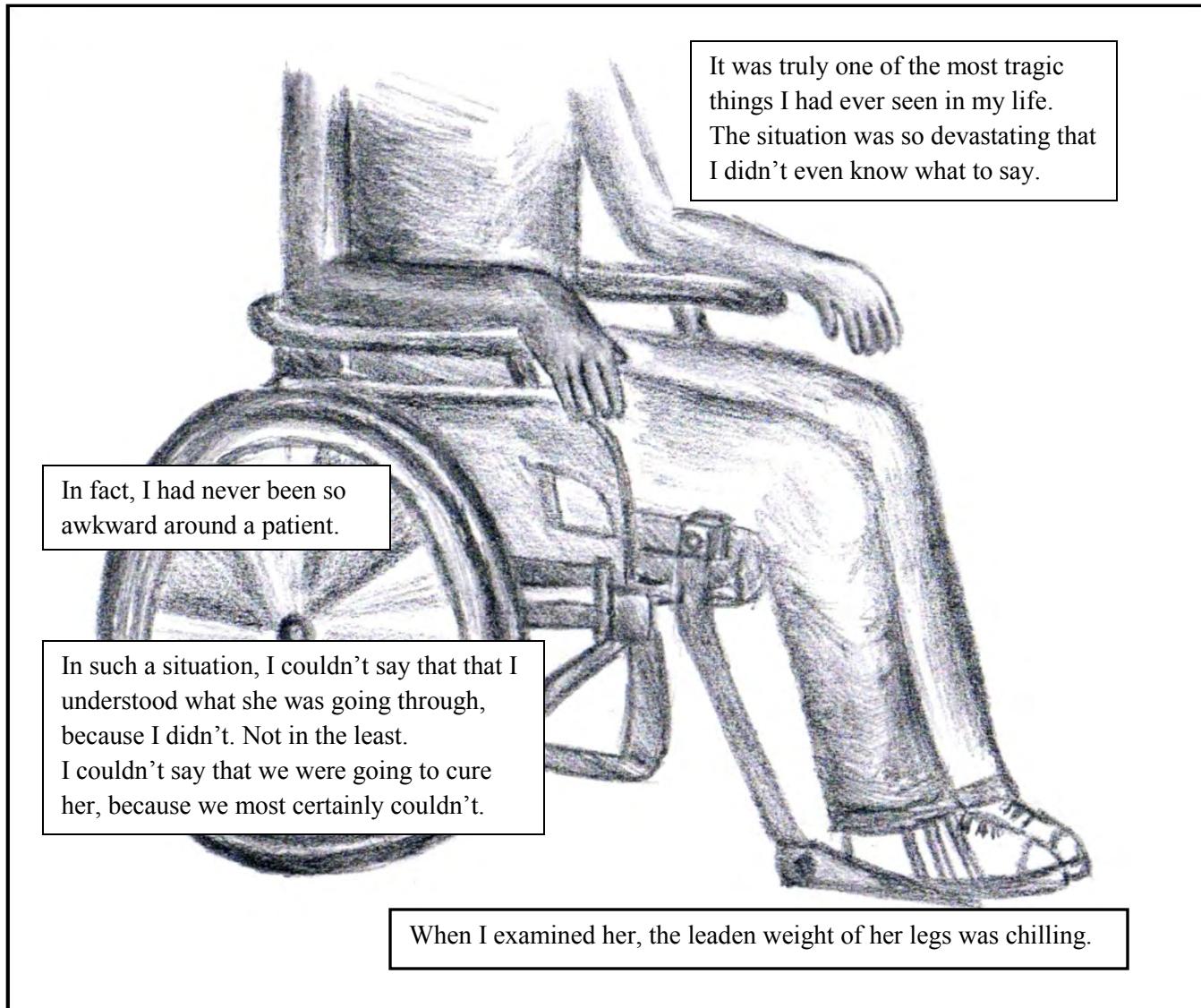
I will always remember that image.

Afterwards, I not only had a great respect for my colleague, but I also would never again doubt the depth that the clinician-patient relationship can reach—even if that clinician happens to be just a third-year medical student.

Case 5. A 16-year-old female with a complete thoracic spinal cord injury following a drive-by shooting.

I remember my first patient with a spinal cord injury.

She had been shot through the thoracic spine and would most likely never regain the use of her legs. It was a drive-by shooting, and they had been targeting her older brother. She was unfortunate enough to have been walking beside him at the time.



Honestly, up until this point, I felt that humanism in medicine simply meant being nice to your patients. And honestly, in ninety percent of cases, that is enough. However, in the most terrible circumstances, it takes a certain level of experience to know how to best interact with your patient. It takes experience to know how to provide comfort in a situation in which you can provide no tangible medical treatments. I didn't have that experience then, but I truly hope to develop this ability over time.

To this day, she is one of the most inspiring patients I have ever met.

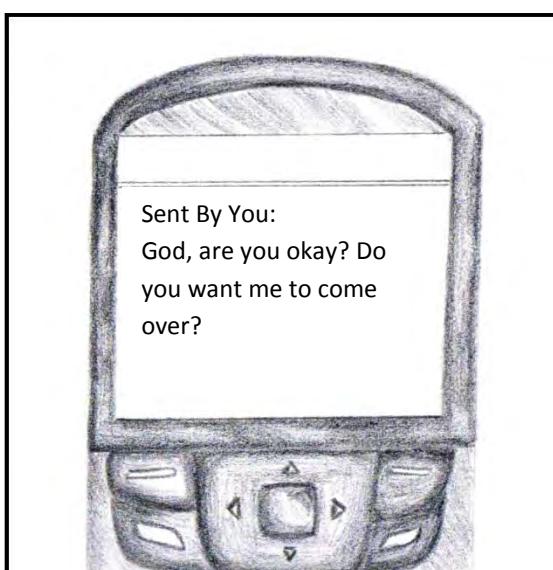
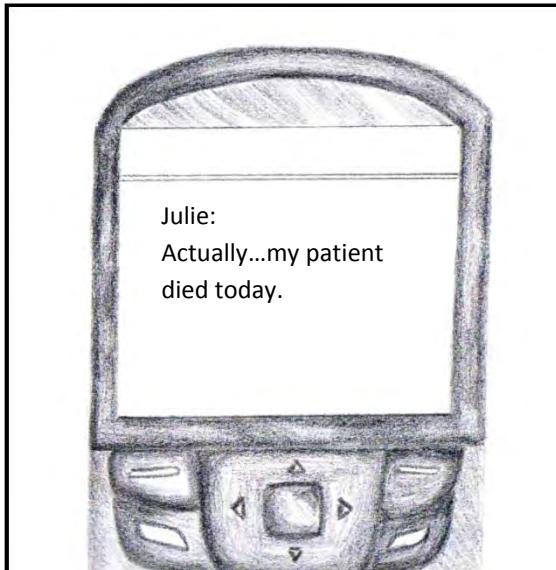
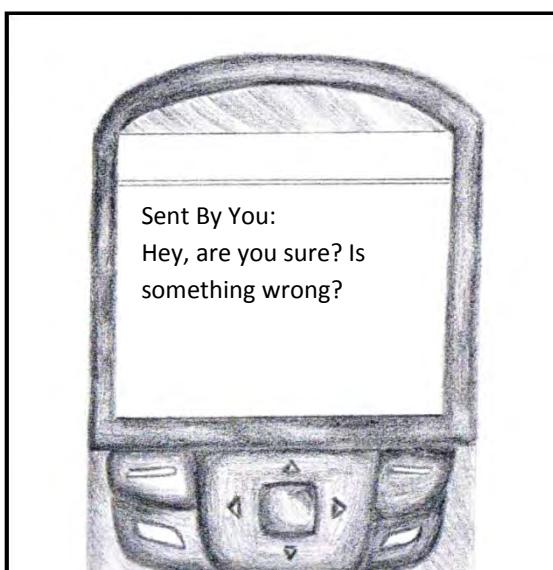
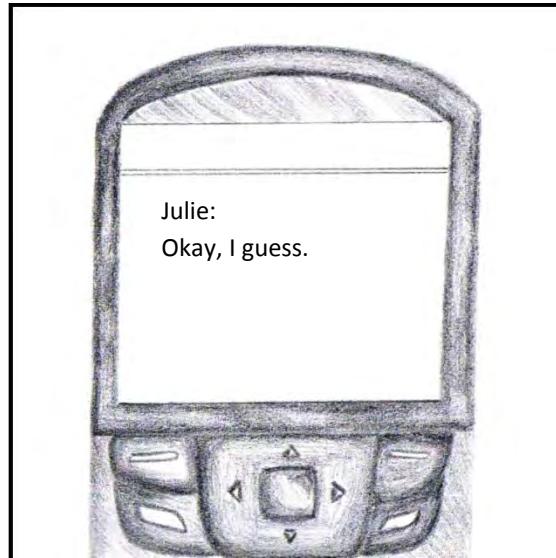
Every morning and afternoon, she diligently learned how to use her wheelchair and how to perform her transfers. She learned to care for herself in spite of her paralysis. And all the while, she never once complained, or even lamented over her misfortune. She never once asked why she had been the one to sustain such an injury out of all of the innocent people in the world.

Though I'm sure she did during the times she was alone, I never once even saw her cry.

On the other hand, if you look back at her records, you will see a few wrinkly tear stains on some of the notes I wrote after seeing her.



Clinical Pearl:

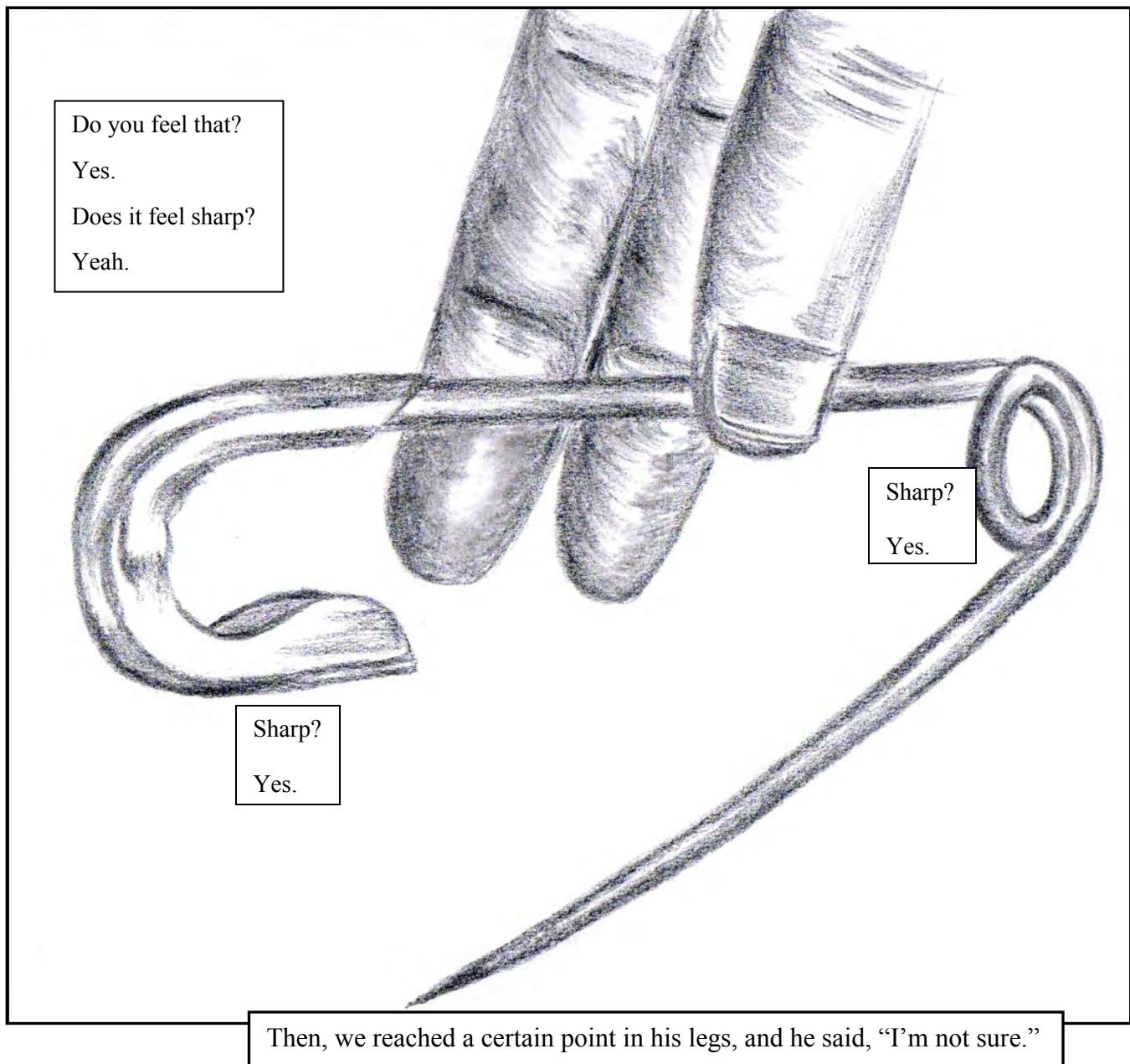


Case 6. A 15-year-old male admitted to the Kessler Institute for Rehabilitation following a lumbar body vertebral fracture and subsequent spinal cord injury from a long-boarding accident.

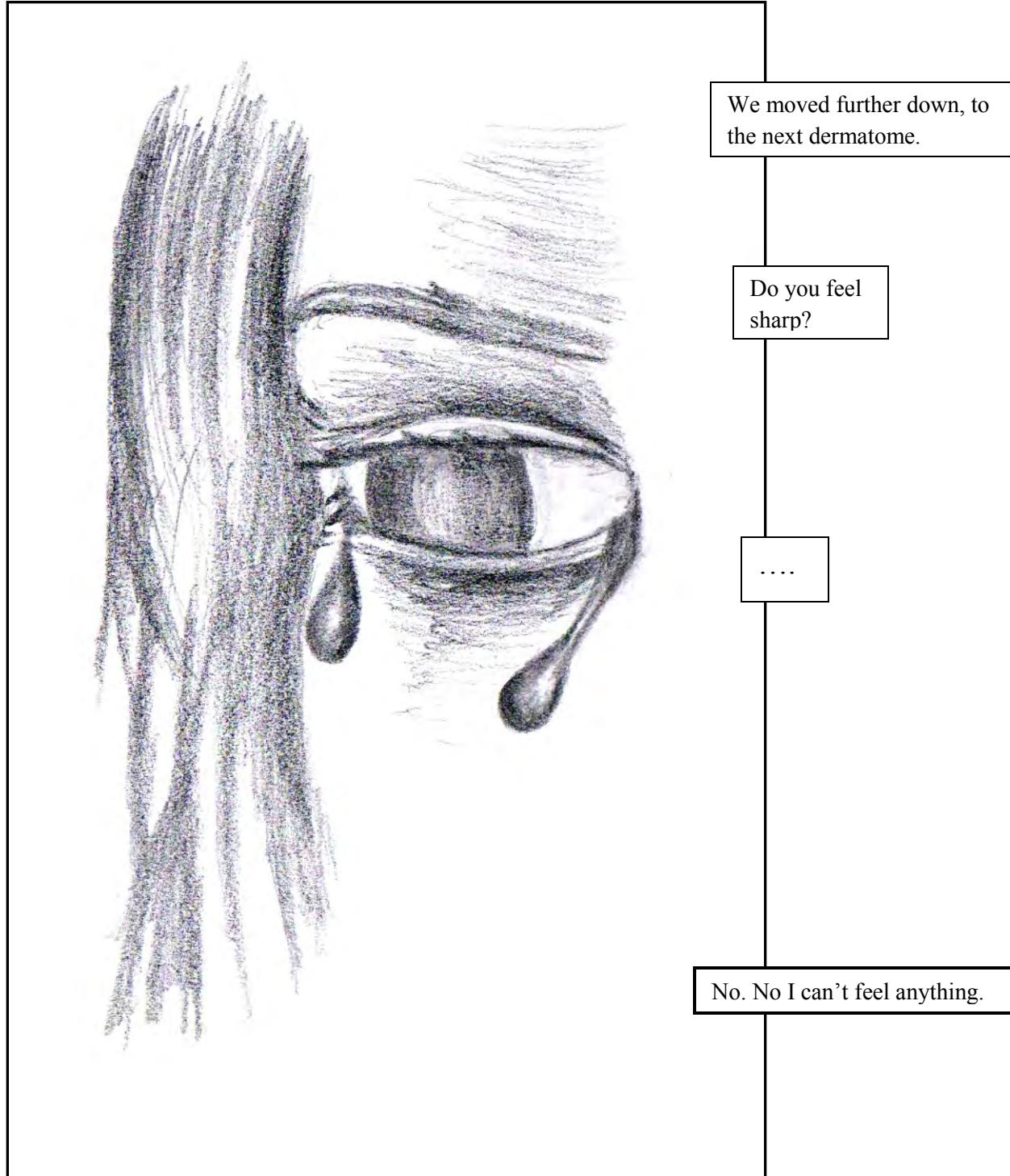
The patient was a soft-spoken teenager with a gentle countenance. Whenever we saw him, he always wore an expression that was split between fear and bewilderment, and yet one could always discern a certain stubborn courage in his eyes.

The first time we saw him, we needed to perform an ASIA exam to determine the extent and severity of the damage to his spinal cord. It involved testing his remaining sensation to both light touch and pinprick.

It was a critical exam, as the result would determine his potential for recovery. Essentially, it would tell whether he had the potential to ever walk again.



His mother, who had been standing utterly stoic in the room thus far, began to show a few tears.



And then his mother, utterly quiet until this point, began to cry uncontrollably, and collapsed into her husband's arms.

Case 7. A 12-year-old male with acute lymphoblastic leukemia.

I have a friend who had been diagnosed with leukemia during his middle-school years. I remember seeing him in the halls during those days, his head stark bald due to the chemotherapy, his skin sallow and his expression perpetually exhausted from the toll of the disease. I remember how several of his teachers had also shaved their heads in support.

Though his name was Andrew, soon after his diagnosis, everyone started calling him “Buddy” instead. I never knew how the nickname came about, but it stuck.



I didn't know Buddy well at the time, but he later told me that he felt that his illness marked a sudden end to his childhood. As he said, “It's because children shouldn't have to know a fear of death.”

While fighting his illness, he began learning the guitar to help pass the time. There is an old photo of him sitting on his hospital bed, a guitar cradled in his arms, his eyes distant and yet oddly serene.

He told me that during his hospital stay, his parents finally allowed him to watch *Braveheart*; it was film he had always wanted to watch, but it had been prohibited due to the violence. In a way, it felt strange that they were giving him this concession only because of his life-threatening illness, and it was chilling to think that it was possible he wouldn't survive to reach the age to watch R rated films on his own.

He also formed a close friendship with another boy being treated on the oncology service.

This friend passed away a month after they met.

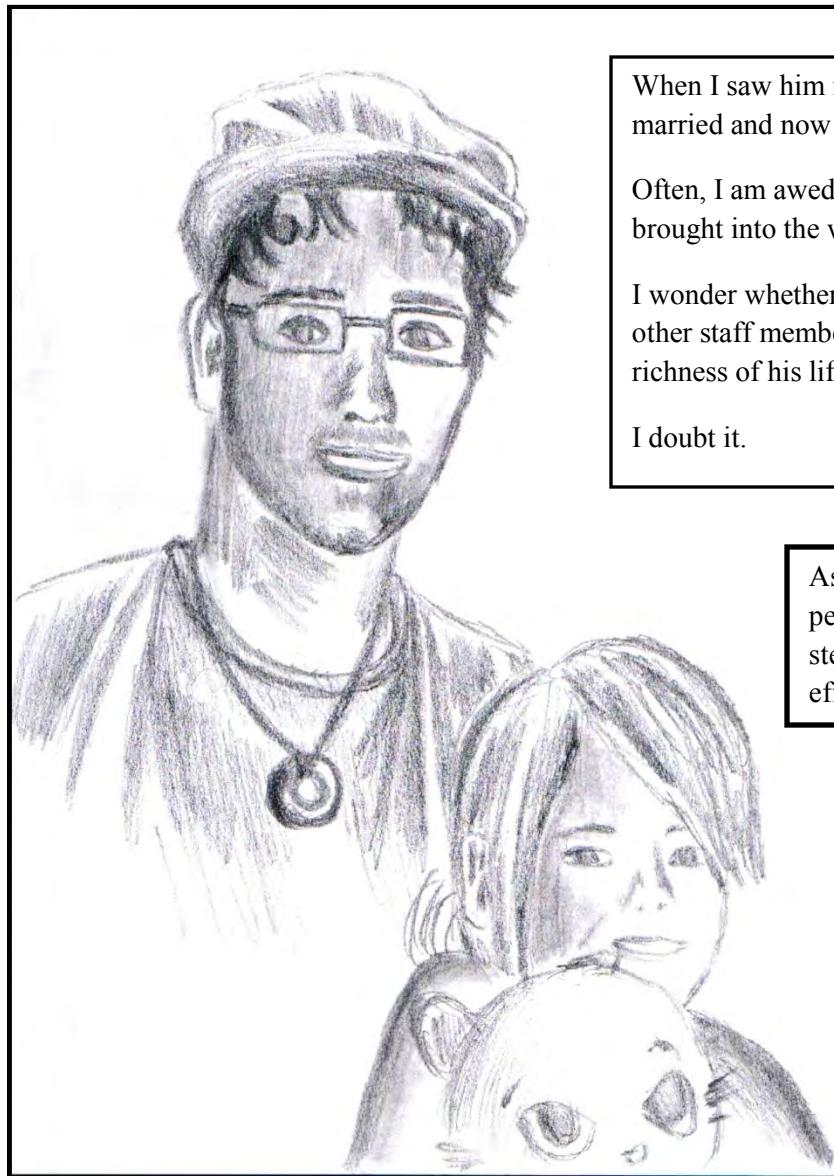
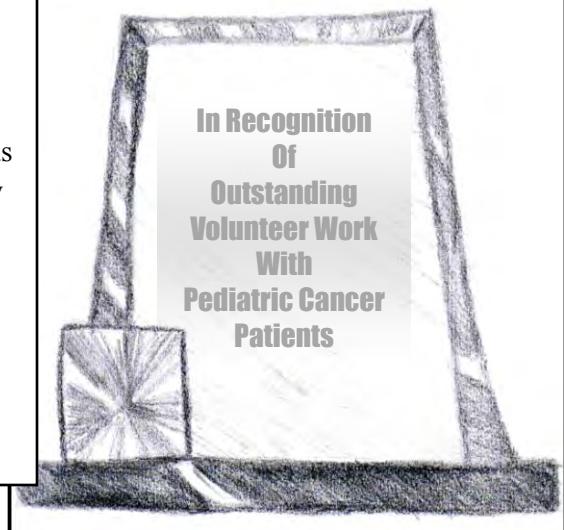
Buddy, on the other hand, survived.

In many ways, he has led a wonderful life in the time since then.

He now plays guitar like Eric Clapton.

He went to school for photography and has a portfolio of thousands of the most lovely photographs—images that came into being only because of his unique perception of the world.

He even won an award for the volunteer work he does with pediatric oncology patients. Sometimes I wonder how much he sees himself in those children, and whether he finds the work difficult from an emotional standpoint...whether the trauma of the time he spent sick still affects him.



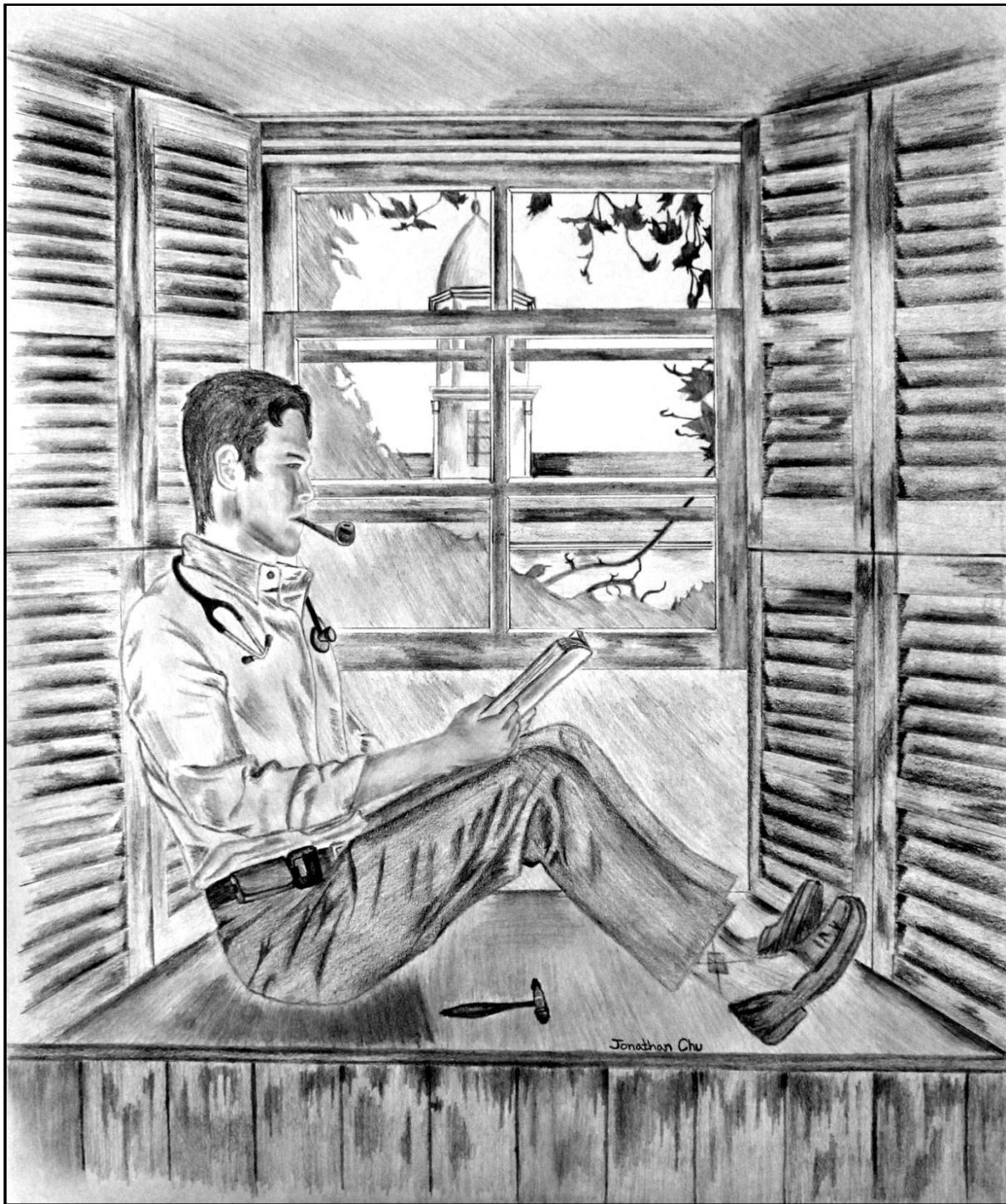
When I saw him more recently, I discovered that he had married and now had an adorable daughter.

Often, I am awed when I think of all the beauty that he has brought into the world because he survived his illness.

I wonder whether his pediatric oncologists, his nurses, and other staff members who cared for him can see the current richness of his life. I wonder if they can see it the way I do.

I doubt it.

As clinicians, and as human beings, perhaps we sometimes need to take a step back in order to appreciate all of the effects of our actions.



About the Author

I am a fourth-year medical student entering the field of Physical Medicine and Rehabilitation, and I hope to make a career caring for patients with chronic pain and spinal cord injuries. It has been my great pleasure to know the wonderful patients I have described in the previous pages, and I have very much enjoyed capturing their stories through words and images.