"Put your chest against this," she says, indicating the box holding the film. The x rays will enter me from behind, go through my chest, and hit the film contained within the holder. She hides herself behind a shielded screen within arm's reach of the control panel.

"Take a breath… now let it out." I do as I am told. "Take another… hold it." The technician takes the film cassettes into the darkroom to process them.

I hurriedly put my clothes back on, working my way back into my white coat while I wait the 90 seconds the processing takes. I still have a lot to do: lectures to prepare for a conference in a few days, rounds to make, residents to teach. And now this x ray, taking up more of my time. I'd already put off having it taken for several weeks. But here I am at last, hoping the x ray will reveal the cause of the recurrent sharp pain in my left chest. Maybe, I tell myself, it'll also explain that nagging cold and cough I had a few months ago. Perhaps I really had broken a rib when I coughed during one of my long training runs. As a matter of fact, I convince myself that a fractured rib would fully explain the pain, especially after weeks of aspirin didn't do anything except make me bleed excessively every time I cut myself shaving. The bleeding, I tell myself, was only because of the aspirin, which makes it harder for the blood to clot. None of this—the pain, the cough, the cold, the bleeding—none of it had completely stopped my running. But I know something is wrong, and that something is slowing me down.

Dave, a radiology resident here at the UC Davis Medical Center, had squinted sidelong at me in the near darkness of the processing room when I told him of the pain and asked for the x ray of my chest. But his brow furrowed, his gaze narrowed, and his jaw dropped when I told him that the pain had been sufficient to start to interfere with my running. Just as everyone at the medical center knows me as Dr. K., a nickname I've had since my own internship, I am equally marked as the physician who runs the year round, at night after work, carrying his beeper, in any weather. I am an acknowledged nut, running in the rain, singing on rounds, trading bad jokes with my patients, residents, and students.

Not only am I somewhat crazy, I'm tough, I keep reminding myself. It takes more than just a little pain to stop my running. Only four weeks ago, despite the pain in my chest, I did a 50-mile run and qualified for my ultimate goal, my personal Holy Grail: The Western States Endurance Run. All the thousands of miles I've run since I first started running as a teenager have been, unbeknownst to me, the physical and mental training for that 100-mile run over the Sierra Nevada Mountains, on trails over peaks into canyons, and across the icy American River. Now, after all those years, I am at last ready to face the challenge that will test my physical limits, perhaps allowing me to see a hidden part of myself. Nothing, not even the pain in my ribs or the fatigue in my legs, would be able to stop me from doing that run, I tell myself. Nothing.

Dave and I wait for the films to appear. A beeper goes off; as usual, it's mine. I pick up a nearby phone and tell the resident that I'll be up on the pediatric ward in just a few minutes, and we can see and discuss my patient together. The x-ray area is dark and quiet, and I savor the near silence, the hum of equipment, and the smell of developer fluid.

"Dr. K.," Dave revives me from my reverie, "your film is coming out of the processor. Want to take a look?"

"Dr. K.," he called, "you'll use lots of numbing medicine, won't you?"

He pulls the black pieces of film from the large, purring box. They are dark wings flapping in his hands as we cross to a view box up on the wall. Dave puts the x rays up against the fluorescent light; we both peer at them.

He is silent. I swallow hard and feel my throat suddenly become dry; my breath chokes in small bursts.

"Are you sure those are my films?"

"Donna, are these here Dr. K.'s x rays?" Dave asks hopefully.

"Only ones in there," is the reply from around the corner. They are mine and mine alone, the shadows before me flying out from the view box into my eyes, which stare with disbelief. I take a step back, then one forward, as if to erase what I see by refocusing the view. Then I look away, snatch a breath of air, and turn to Dave.

"Well, well, isn't this interesting."

"No," he says, "I don't think so."

My rib is fine. In fact, there's nothing wrong with that side of my chest, the area of the pain I've been having. But there, right there in the upper central part of my chest, is a large, fist-sized blotch of white, a mass, a something. It pushes my windpipe far to the right, kinking it. My spine, as if in religious devotion, genuflects with a soft curve pointing to my left, bowing toward the white mass filling the upper part of my chest.

My breath is now frozen in my throat, and my eyes glaze over as I attempt without success to smile through the fear that grips me. What the hell is this…this thing? What is going on with me? Then, quite suddenly, I realize into whom I have been transformed at the moment I saw the white shadow on my film. And although I can't possibly know it completely, my new persona is taking over as it melds itself unalterably into my being. I am no longer the doctor. I am the person with the disease.

My mother gets up from her chair before I can move. She is too accustomed to waiting on the family and is about to take my soup bowl when the phone rings. She picks it up, says hello, covers the mouthpiece, and turns to me.

"It's for you. It's Dr. Rosenow." She uses the formal term even though he can't hear her. She hands me the phone.

"Hello," I say into the phone.

"Hello, Geoff. Listen, I want you to come back in now. We need to get a sample of your bone marrow."

I am silent for a moment, then can only utter, "Now?"

"Yes. Come to my office, and I'll arrange it from there. We need to do it this afternoon." I hear myself say "okay" and hang up the phone even as I feel myself hurtle toward fear and panic. I know what a "bone marrow" is.

During my residency in pediatrics at Stanford, I spent several months on the hematology-oncology ward, where many children received chemotherapy. I gave a lot of the chemo. I also learned how to do "marrows," the medical shorthand for sticking a large needle through the thick outer layer of bone into the marrow and aspirating, or sucking out, a sample of cells into a syringe.

It was about my second week as an intern on heme-onc when I entered the small treat-

ment room to do my first bone marrow. The nurse and the resident who were there to help me were waiting with Joey, the 9-year-old boy fighting his losing battle with leukemia. He wore his customary knitted wool cap to cover his chemotherapeutically bald head. His usual grin was absent. He was an unwilling veteran of too many bone marrows, too many courses of chemotherapy, and a war he neither chose, desired, nor deserved.

The gurney on which Joey sat took up most of one side of the room. Joey's mother held his thin hand, the one without the IV, and rubbed his shoulder. For some reason, she gently pulled off Joey's hat, and his bald head aged him before me, the veins beneath the skin of his scalp showing a faint blue, his face a mixture of pallor and sallowness atop a fatigue derived from the chronicity of his illness. Joey and I'd quickly become friends soon after my arrival. I had seen him daily on rounds, had traded jokes with him, and had sat during late evenings with his parents, listening to their sorrow amid the dozens of families who each suffered alone and together in the terrible grip of cancer. I now felt that everything about the relationship I had with Joey was on the line.

Joey knew that I'd seen other marrows done, and he knew that I'd never actually done one. As the saying goes in medicine: "See one, do one, teach one." He offered himself, I think now, for my initiation with full understanding and willingness. He hated bone marrows, he told me, but he knew that they had to be done.

As I walked into the room, his gaze passed first to his mother as she said good-bye and went out of the room. She hated the procedure as much as her son did, and she could not stand to be in the room for any part of it. Joey then met my eyes, which tried not to belie my own fear and acknowledged inexperience.

"Dr. K.," he called, "you'll use lots of numbing medicine, won't you?"

"Sure, Joey. I promise I will. And I'll tell you everything I do, before I do it." That was the important part, my resident had said: don't lie. Always say what you're going to do before you do it. And always use enough of the "numbing medicine."

"Okay, Joey, bend your left leg and put it under your right one." I felt with my fingers the bone forming his small right hip. The anterior iliac crest, my target, was broad and easy to feel. The resident, there to supervise and teach, confirmed the location. It was all



I sit there hearing almost nothing except the sound in my head telling me that I hear nothing, that I am not there, that I am dying, that I am not dying, that I don't know what is happening to me.

business now. I opened the bone marrow tray and put on sterile gloves while the nurse poured the Betadine sterilizing solution into a cup. I picked up a gauze square from the tray, dipped it into the Betadine, and turned back to Joey.

"I'm going to clean off your hip, Joey. That's all I'm going to do, first. This'll be a little cold." I hoped he couldn't hear the flutter in my voice or feel the tremulous hand that cleaned his hip with one, then another, then yet a third Betadine-soaked gauze pad. The area was clean. I put a sterile towel with a hole in its center over the site, allowing me access to the bone. I loaded a syringe with nearly a teaspoon and a half of Xylocaine, the wonderful numbing medicine.

"Joey, I'm going to numb the skin. This will be a little bee sting." He said nothing but held his breath.

I put the needle just into the skin, just where I would want to get the marrow. I started to inject the Xylocaine. Joey gave a short gasp and started to cry as the Xylocaine went in with a burning sensation. He held perfectly still, giving me a good target.

"Okay, Joey. I'm sorry. But I want it to be numb. Okay? Joey?"

"Okay," he whimpered. The needle was still in his hip. I angled deeper, injecting the

medicine as I went. Joey was still whimpering when my needle hit something hard, the bone. I kept injecting, even as Joey cried out with the sudden extra burn of Xylocaine going into the covering of the bone. I stopped injecting and pulled the needle out.

"I'm done with that, Joey. You're all numb. I'll check and make sure. Can you feel this?" I asked, touching the skin with the point of the needle.

"No, I don't feel anything there."

"Great," I said, more for myself than for him. I made a small incision with a scalpel, right in the middle of the area, and turned back to the marrow tray. I picked up the large marrow needle, nearly an eighth of an inch in diameter. It looked and felt like an awkward, heavy, outmoded piece of equipment, like a discarded part of an old torture device, with a patina of dull brown, totally unlike the acceptable, shiny, thin, and delicate object a needle should be. If it had been an animal, it would have been an ox. Within its barrel fit a solid metal insert, called a trocar, which gave the entire device the strength to go through solid bone without breaking. I checked the fit of the two, taking the trocar out and replacing it within the needle. With the trocar inside it, the needle was solid.

I silently said a prayer. I wanted the needle to go in straight, not to slide alongside the bone. I wanted the needle to go in just far enough, not all the way through the bone and out the other side, not that that could happen, I tried to reassure myself.

"Joey, I'm going to put in the needle. You won't feel much except me pushing on you."

"I know" was the reply. And it was true. He knew far better than I did. And he knew how it really felt far better than I did.

I took the needle-with-trocar assembly and pushed the whole thing into the incision until I felt the bone. Then, with pressure as steady as I could muster, coupled with a slow rotation, I felt it go through the outer layer of bone until I felt a give. The end of the needle was sitting in the marrow. I pulled the trocar out of the needle, which stuck out of Joey's hip like some deadly projectile or a misplaced antenna. I took a large syringe, placed it on the needle, and turned it, locking it in place.

"Okay, Joey, this may hurt," I warned. I was about to aspirate a small amount of the marrow into the syringe. I had been told that it felt like a sucking deep in the bone. I had no idea what that meant, but Joey, who certainly knew, held his breath as I pulled up on the plunger of the syringe as hard as I could, holding the needle in place in the marrow. After what seemed like an eternity but was in actuality only a few seconds, I saw small bits of red tissue and blood, the aspirated marrow, dribble into the syringe. The sample was small, but the technician who took the syringe from my shaking hand told me it was adequate. I put the trocar back into place.

I somehow pull myself out of the chair and manage to get my jacket on despite my shaking hands. I am suddenly very cold.

"Joey, I'm taking out the needle… now," I said as I pulled out the weapon and covered the wound.

"You okay?" I asked. "We're done," I said, then realized that I was the only one who was done. Joey was the one who still had leukemia.

"Thanks, Dr. K.," Joey said. "You did okay. You gave me enough numbing medicine."

"Thank you, Joey. You were very good. I'll see you later today. After lunch." The gurney was being wheeled out to take Joey back to his bed.

"Okay. See you later."

Joey died less than three months later, his leukemia being stronger, smarter, and far meaner than all the drugs we threw into his tender body. It was to the end unfair: all the pain endured, all those drugs, all that suffering by someone so young, and for what?

Now, during lunch, I hear again Ed Rosenow's voice as he calls me for my own marrow examination. I swim into the cries of the children like Joey, whose marrow I'd taken in the past. I tell myself that I am feeling the cold Betadine, the hot Xylocaine, even though I've never felt either. The spoon falls from my hand into the soup.

"What was that about?" My mother mimics my own open-mouthed stare. The two of us breathe slowly.

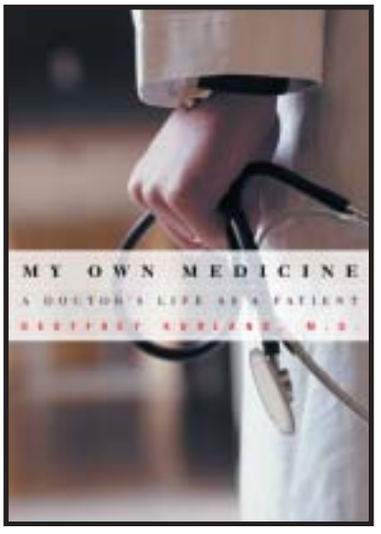
I tell her in two sentences. "Ed said there's something wrong with my blood count. I have to get back and have a bone marrow done this afternoon." I somehow pull myself out of the chair and manage to get my jacket on despite my shaking hands. I am suddenly very cold.

"Geoff, you have hairy cell leukemia." He may be saying more. In fact, I know he is saying more. But I sit there in a locked expression, hearing almost nothing except the sound in my head telling me that I hear nothing, that I am not there, that I am dying, that I am not dying, that I don't know what is happening to me. And somehow part of me sees Ed Rosenow and feels in some way sorry for him, for being the messenger of such terrifying news. And after what seems hours, during which I have left the room, talked with my parents, tried to comfort Karin, watched myself die, then start to live again, I find myself with the same locked expression, sitting on the couch, Ed calmly speaking to me:

"…you to meet Tom Habermann, who is a hematologist and knows a lot about hairy cell leukemia. We'll go to his office now; it's down on West Fifteen."

I will myself to get up and follow Ed to the elevator.

At Tom's office, only three floors down, Ed introduces us as he might introduce fellow physicians to each other. But I know (and Tom knows) who is the doctor and who is the patient. Tom had been filled in earlier by Ed, who soon excuses himself to get back to work. I am reminded of the time, seemingly long ago, when I'd been on my college track team, receiving, then passing the baton in a relay race. Now, I am the baton, and Tom Habermann has me for the next mile or two, or perhaps, if things go well or if they don't go well, longer. I only hope he's ready to run. ■



Kurland's memoir was released in 2002.