Preface

When I started medical school, my colleagues and I wanted more than anything else to be healers. We didn't realize that the future we imagined was an illusion. As a practicing surgeon for twenty-six years, I watched with disappointment and even dread as more and more of my time was spent battling the "system" than the diseases I had been trained to destroy.

Over the years in the real world, obstacles began to come between us and our patients—between us and our ideals. Those obstacles included hospital administrators, malpractice attorneys, and real threats to our very lives from contact with a new breed of emerging deadly viruses, including hepatitis, Ebola, and AIDS. We often felt as if we were becoming alienated and separated from the very people we were trying to heal.

Sadly, we became more cynical, our jokes more caustic and less funny. Inevitably, a few of us lost our compassion. Some of us survived the rigors of this profession; many did not.

As I take you on my journey, I tell the stories of that passage through time. These are the accounts of real patients and real surgeons. It is important that those who are not medical professionals understand the realities of the pressures that are brought to bear on doctors and others when decisions must be made concerning life and death.

Our system of medical care has undergone more dramatic changes in the last seven decades than at almost any other time in

history. The specific diagnostic and therapeutic tools available to physicians today were beyond the imagination of the young men and women who joined me on that first day of medical school in 1961. None of us could have dreamed that we would see miracles such as CAT scans and magnetic resonance imaging, which would give us the ability to accurately diagnose patients without the need to invade their bodies. Even as an actively practicing surgeon, I initially scoffed at the idea that we could do major surgery through a pair of tiny three-millimeter incisions in the abdominal wall and watch our instruments at work on a TV monitor. A few months later, I was teaching laparoscopic surgery techniques to other surgeons in New Zealand. Today, minimally invasive surgery is routine in many areas of surgery.

But with all these miraculous tools, we have still not resolved the critical issue. Doctors are people with joys and problems like anyone else. They are subject to the same emotional ups and downs as their patients, but a surgeon doesn't have the liberty of having a bad day. A physician cannot ask a sick patient to wait until the doctor has had some rest, until the doctor is having a good day. There is, in the very nature of healing, a huge discrepancy between what we ask of people in other jobs and professions and what we ask of our healers.

In this book, I want you to travel with me and seek an answer to the question of how we, as physicians and surgeons, deal with these pressures and constraints; how sometimes we can keep all the balls in the air; and how sometimes—inevitably—we drop one.

Most of the doctors with whom I have had the privilege to work are dedicated men and women who have sacrificed much to their profession. Sometimes our compassion starts to run dry. Most of the time it does not. This book tells the stories of the struggles in between.

I urge you to keep in mind that the events in this memoir take place between 1951 and 1993. When we encountered diseases we had never dealt with before, we were—rightly or wrongly—afraid for our lives. Insensitive jokes and gallows humor helped us cope with daily stress and trauma, but many of our remarks would be considered inappropriate in any context today. I decided, however, not to remove potentially offensive passages as our fears and words accurately depict the reality we were living in at the time.

For privacy reasons, the names of patients and some institutions have been changed. I also changed the names of the doctors and medical and surgical professors who were pivotal in expanding my knowledge and expertise—to whom I am forever grateful.

My experiences and the lessons I learned from them have consistently guided my decisions—both in the operating room and outside it.

Although I no longer see patients, I am still a doctor and will always be one.

PART 1

Inspiration

CHAPTER 1

The Friday Night Knife and Gun Club

Boston, Massachusetts, 1969–1970

I PUT ON MY WHITE COAT, GRABBED THE BEEPER FROM THE nightstand, and walked down the five flights of stairs. At the bottom of the stairs, I turned left into the tunnel to the emergency room (ER). Just as I started my walk, I heard desperate screaming coming from behind me. Fifteen yards down another tunnel, a man and woman were struggling. I turned and instinctively took a step in their direction. Then I saw that he wasn't punching her as I had first thought. He had her up against the wall and was holding her by the throat with his left hand while wildly stabbing and slashing at her with the knife in his right hand. The man turned and looked at me for a second, and then as if I didn't even exist, he turned back and continued his work.

I yelled, "Stop!"

He didn't.

I turned and ran through the tunnel as fast as I could to get the police. It never even crossed my mind to step into that fight. Enough years working in the emergency room and conversations

with arresting officers bringing victims in for care had taught me that even the police fear domestic violence more than any form of street crime. Many officers have been badly or fatally injured after getting between warring spouses who then turned on the officer and attacked him together.

The ER was three hundred yards away, and the first uniformed guard I ran into was hospital security. He was unarmed, so I had no time for him. I wanted help from the Boston police who were on duty in our ER. As the saying goes, "You can get more with a kind word and a gun than with a kind word alone."

Right then, right there, I wanted a man with a gun.

Friday nights were particularly bad at Boston City Hospital, especially around eleven o'clock, when my natural body rhythms told me it was time to sleep. I knew better. I had little chance of sleep on any on-call Friday night.

The hospital was covered by three surgical services. Tufts, Boston University, and Harvard all had surgical residency training programs that were known respectively as First, Third, and Fifth Surgical Services. Locally, they were called One Surg, Three Surg, and Five Surg. I belonged to Five Surg.

The three services were on on-call rotation in the emergency room, and patients needing admission were admitted to the three services in sequence. On Friday nights, all three teams would be up throughout the night operating on the victims of mayhem inflicted by what was called the "Friday Night Knife and Gun Club."

The violence was somehow always worse when the moon was full and on the nights when the welfare checks went out. When the two coincided, the ER became a nightmare. I don't know why. It was just a fact of life.

After a full day of surgery, ward rounds, teaching rounds, and meetings, residents quickly learned that eleven o'clock on a Friday night was only the beginning.

As senior surgical resident in my fifth year of postgraduate surgical training, I had the prerogative of catching a little rest in our on-call room. While the interns and medical students shared bunks in a room where the phone never stopped ringing long enough for anyone to get any rest, we senior residents at least had a room of our own. It had a bed, a desk, and a closet filled with hundreds of back issues of *Playboy* magazine. We called the room "Control Central" in those days shortly after the first man walked on the moon. The junior residents called our place the "Turkey Tower."

On the night when the first astronauts walked on the moon, we were busy trying to see how many extra tests we could order on a particular patient to delay his operation long enough for us to be free to watch that first small step for man. We were still unsophisticated enough to be thrilled along with the rest of the world by that great moment, but when that space-age evening was over, we spent the rest of the night putting pieces of people back together the old-fashioned way, with needle and thread.

In all the years on-call in that hospital, I don't think I ever slept a full weekend night. If we weren't operating, we were evaluating a case that needed a decision or tending to problems of postoperative patients. We had little if any time to read or relax. The learning curve was steep; the pace was soul-wearying. We lost our humanity and tenderness beneath the deluge of misery and death that we confronted. Our humor turned black and evil, and we became desocialized. People from the real world with real jobs just didn't want to be with us. We sought solace in our own company.

Though we functioned as surgeons, most of us were still in our twenties and had not yet even confronted death within our

own families. But there we were, day in and day out, dealing with life-threatening situations and families torn with grief. Our emotional stability suffered, and our own family lives were ripped apart. Many of us were newly married and had small children whom we seldom saw. One of my friends told me that he came home one night after a grueling three-day weekend on call to hear his four-year-old say, "Go away. You're not my daddy. I have no daddy."

Today, that little boy is a surgeon.

We worked without decent rest from six in the morning on Saturday straight through until Monday evening when we had our Death and Complications Conference. There we presented our problem cases and deaths to the panel of professors, then took a verbal beating for our perceived stupidity. We got home Monday around seven at night after sixty hours of duty to families who expected our love and attention. It was all we could do to stay awake long enough to finish dinner. I often fell asleep on the living room floor right after dinner. Then back to work at six on Tuesday morning to return home again Wednesday night.

It wasn't fun, and I'm not sure it was necessary. But we all did it, and we passed the system on to the next generation.

One of those terrible Fridays is as clear to me decades later as it was that night. It was about nine in the evening, and I was in bed in the Turkey Tower reading *Papillon*. I felt claustrophobic reading of Henri Charrière's incarceration in solitary confinement on Devil's Island, so when an intern called for help from the emergency room, I was relieved to have an excuse to leave my room.

A patient had been stabbed in the hand, and Five Surg was up for the admission. By the sound of it, this case would go to the operating room, and that, too, relieved me. Our hand resident for the moment would cover the case, and I could maybe catch some sleep for a few

hours. Later I'd learn never to announce such plans or even let them surface in my mind because I usually ended up eating my words.

I put on my white coat and walked down five flights of stairs to the tunnels. Boston City Hospital in the '60s was a sprawling hodge-podge of old, ugly red brick buildings. It had no pattern or design. Our house officers' quarters were some distance across a parking lot from the emergency room, and the tunnels were a quick route between buildings. Tunnels linked every building, and the maze took a hell of a long time to learn. The new interns were forever wandering around trying to find the lab, the x-ray department, and even their own beds.

And it was in the dimly lit tunnel that I saw, for the first time in my sheltered life, that truly violent act of a man stabbing a woman.

I ran up to two policemen who were busy booking a man for assault, and while still out of breath from fear and adrenaline more than the exertion, I yelled, "Come! Now!"

The terror must have shown in my eyes because they instantly handcuffed the man to a gurney and followed me. I was like a dog trying to lead his master somewhere, running ahead, then running back to make sure they were following. I felt secure seeing that these two big guys who were on my side were running with me. I especially liked seeing the two huge guns strapped to their sides, bouncing in their holsters as they ran. To this day I get angry at the people who say, "You can never find a police officer when you need one."

That night, the lady in the tunnel and I both needed an officer, and they sure as hell were there for us.

We turned the last corner to see her lying in a great heap on the floor. Blood was everywhere. It hardly seemed possible that so much blood could flow from one person. Both the policemen and I were accustomed to carnage, though I had never actually seen it performed. Usually, the blood was left at the scene, and by the time I saw the patient, they had been cleaned up.

But this scene shocked all three of us.

The woman's wig had fallen off and was lying next to her body so I could not see her head. I stopped dead and said, "Oh shit, he cut off her head!"

The policemen, seeing her head was just where it should be, looked at me as if I were a little weird. They said nothing.

We ran closer and saw she was breathing, though not moving and not conscious. The man was gone. One officer stayed with me while the other went in pursuit of the man. They didn't have to speak. They had done this before. The next job, taking care of the victim, was mine, and I had done this, though never in a dimly lit tunnel.

A stretcher wheeled by an out-of-breath orderly and a medical student arrived a minute later. The four of us lifted her onto the stretcher—an effort as she weighed a good 250 pounds. A policeman grabbed the wig—I guess from the habit of securing evidence—and tossed it atop her body. We began to roll the stretcher back toward the ER and had picked up speed when we hit the first turn. We didn't make it.

The stretcher wheels wobbled, then locked, and the woman slid straight off the end and onto the floor with a terrible thud. We lifted her back onto the stretcher and once more headed for the ER.

Just before the ER, the tunnel made a steep incline, and at the bottom was a small lake made from underground leaks. Instead of fixing the leaks, the City of Boston built a crude wooden bridge to allow passage across the fifteen feet of the lake's surface. We, the resident staff, had named the bridge and lake after the commissioner of hospitals.

We hit the bridge and slid into the lake. That was no problem, except that to keep our patient on the stretcher, this time we all had to wade in, ankle deep. It would be twenty hours more before I had my first chance to take off my wet shoes and socks

only to have to wear them again since I had no others with me for the weekend.

Finally, we wheeled her into the trauma room and called for help. The regular staff streamed in, and in seconds we were up to our asses in residents, medical students, interns, and nurses. Most of these were well-practiced professionals, and despite the unusual events that had just happened to me, the group easily shifted into gear and took over her care. In minutes the surgical team had placed four intravenous lines to replace her fluid loss until we could transfuse her with blood of her type. The anesthesia team was busy inserting an endotracheal airway because the woman had stopped breathing just before she arrived in the ER. Nurses cut away her clothing so her wounds could be examined and cataloged for treatment.

I was whipped emotionally and physically. As soon as things were in some semblance of order, I started for the door. As I left, one of the cops put out a hand and smiled slightly.

"Thanks, Doc. Good job."

We shook hands, and I walked out of the room. Feeling grateful to these men who earned their living in such difficult, dangerous ways, I turned back to say thanks for what he had done, but when I got back to the room he was gone. I turned to go and saw his partner leading the woman's assailant down the hall. The man was handcuffed behind his back, and the officer was leading him to the booking room in the ER. The man glared in my direction, and I thought he must have recognized me. I couldn't have identified him if I had to. In all the terror and excitement, I hadn't any idea what he looked like. The event was less than ten minutes old, and I, the key witness to attempted murder, could not make the ID. The man turned out to be the woman's husband and had been caught literally red-handed. He was led away, and I wasn't even asked for a statement.

I was looking for my intern to see if I could help him with his stabbed hand case when I heard the admitting clerk turn to the

nurse in the trauma room and say, "That multiple stabbing goes to Five Surg."

"What?" I asked. "We just got that stab wound of the hand. She's not for Five Surg just because I rolled her in here. It must be One Surg or Three Surg's turn."

I was trying not to whine.

"Sorry, Doc. She's yours. Since your last admission, One and Three already have had one each. You're up."

"Shit. *Shit*!"

She was literally mine, and I wasn't going to be able to hand her off to the junior resident either. Our chief resident and I spent the next several hours trying to save this poor woman who had landed so abruptly in our care.

More of my team arrived, and four of us wheeled the stretcher to the elevators. We needed three more helpers to carry all the equipment coming along—blood bags, IV poles, respirators, and the panoply that modern medicine employs to keep people alive between floors. Today operating rooms (ORs) are usually near the ground floor, but back then, in that antique hospital, they were five stories up. And this OR still had a waiting list on that busy weekend night. The surgical service residents for Tufts, Boston University, and Harvard all argued for our places in line.

After a long wait, the elevator doors opened, but we were positioned at an angle that wouldn't allow the stretcher to be wheeled straight through. We struggled to move it sideways, but a wheel jammed with rust and age wouldn't swivel. The elevator operator stood there staring at us.

"Mind giving us a hand?" I asked, my tone hostile.

He stepped out and pulled a plastic identification card on a lanyard out of his shirt pocket. He shoved it up to my nose. "Can you read this? 'Elevator Operator,' not 'Orderly.' I don't push stretchers."

I sagged.

Thomas, the junior assistant resident who had just arrived and was helping us push the stretcher, stepped up. Thomas had been captain of his varsity hockey team, and without a word, he grabbed the elevator operator by the lapels of his gray hospital coat and lifted the man off the ground—a hard thing to do to a grown man. Thomas wheeled around with the man's feet still dangling in the air and shoved hard as he let go of the lapels. The man sailed a few feet and landed among the overflowing trash barrels.

"You piece of shit," Thomas said.

We turned back to the patient, and Thomas lifted the stretcher by himself to straighten it out. We wheeled the patient through the doors and hijacked the elevator. I drove it to the operating room floor.

Thomas said, "Next stop, fifth floor, please."

We felt good about that little episode with the elevator operator but later paid for it. The elevator man filed a formal complaint, including criminal assault. Backed by his union, he threatened to press charges against all of us. Thomas ultimately had to apologize publicly to the creep to save his own medical license and his new career.

We ran the patient into the operating room, which was already so crowded that there was barely any space for all the equipment, let alone the patient. Allen and Mark, the two on-call anesthesia residents, cramped behind the big machines, secured the patient's plastic airway with adhesive tape. They put antibacterial ointment into her eyes and taped her eyelids shut to prevent inadvertent injury while she was asleep. The medical students were busy cataloging her injuries. They were hoping we would be so busy with the serious injuries that we would need them to sew up all her superficial lacerations. They were right. She had more than thirty stab wounds that needed cleaning and closing, and it kept the boys busy much of the night. They loved it.

Meanwhile, the blood bank was frantically calling for more blood donors for her. We were pumping it in fast through the four separate IVs, but she was pouring it out faster. The floors were slippery with blood that night, and it would take thirty-seven pints of blood to replace what she would ultimately lose. The human body holds a total of only ten pints. I thought she was very lucky to have landed in Boston City Hospital, where such trauma is routine and we could save her life.

When the rhythm and pattern of the proceedings settled down a bit, I asked the anesthesiologist, "What have we got? Blood pressure? Any urine output? Is she alive or are we just jerking off here?"

"She's got a pulse and an arterial BP of about forty according to the A-line," Allen answered. The A-line is a plastic catheter inserted into an artery for continuous and accurate blood pressure monitoring. And a BP of forty could mean a patient's close to death.

"I don't know what her urine output is," he added. "I can't see the Foley bag from here. Anyone see if she's peeing?"

"A little—maybe fifty ccs since the ER," a student at the foot of the table told us.

"And, Tony," Allen said, "you are still jerking off. There's no way, man."

"I know. But her heart's still pumping, so let's just go through with it. We've got nothing to lose. She's probably got some bad injuries we don't even know about yet. I'd just like to stop all this goddamned bleeding before we let nature run its course. Let's go."

Joe, our chief resident, senior to me, had arrived from his room in the Turkey Tower. We briefed him.

"Tony, you and I'll scrub now and start on the abdomen. The chest seems okay. No pneumo, is there?"

"Not that we can tell. The portable chest x-ray from downstairs is pretty bad quality, but I can't see any free air or a collapsed lung," I answered. "She's got good breath sounds on both sides, and with all

this positive pressure the gas-passers are giving her, she should have crashed by now if her lungs were punctured. She seems to be passing the test of time."

"Okay. Get the students started cleaning up the extremities. Put one student on each arm and any other small lacerations they can do. I think the legs are okay, but just check and see, especially underneath. I want two more warm bodies to scrub, one each with you and me on the abdomen. Maybe both 'terns."

The interns held the retractors for us on this one. They were clearly disappointed not to be the operating surgeons. All trainees think they can do more than they really can, and handling big cases is their only payback for all the hard work and bad hours they suffer through. But this case did not match to their levels of skill because speed was going to be the factor that determined whether this poor soul would live or die. She deserved the most senior of the resident staff, and she got it. Joe was in his sixth and last year and was an experienced trauma surgeon.

We walked out into the hallway and lined up at the scrub sink. It was silent there, for the closed operating room doors damped out the commotion inside the room. Looking into the operating room through the window was like watching a silent movie. All the commotion and activity inside went on in complete silence from our point of view.

The surgical ritual of washing hands has always been important to me. Most of the time, the act is little more than a ritual, and in some cases, it is more important to wash afterward. But other times I get a sense of calm from the warm water and the cleansing process, for operating rooms are generally kept cold since the team wears scrub suits, gowns, hats, masks, and gloves. This moment also gave us a chance to breathe deeply and get centered for the task ahead. There we could leave the racing and hysteria behind us and just think about the job.

"Let's just get a peek into that abdomen, Tony," Joe said. "Most of the wounds look superficial. I'm not even sure whether any of them penetrated the peritoneum."

I nodded.

Thomas said, "But let's not make one of those peek-a-boo candy-ass incisions. I don't want to stand up at the Death and Complications Conference next week and explain to the boss how we missed a tiny tear in the colon and why the lady boxed from fecal peritonitis." Thomas had lapsed into the cruder slang that permeated residents' language. "To box" meant to die, thus finding your way into a pine box.

"I know, I know," Joe said. "Open her as wide as you want, but let's just get in, see what's going on, fix it, and get out. There's no need to make this a teaching case and be here the whole fucking night."

We rinsed our hands and arms and backed through the swinging doors into the OR.

A transformation had occurred. Order had replaced apparent chaos. One of the great pleasures of being a surgeon is entering an orderly and clean workplace each day for each operation. The floors had been cleaned of blood; the patient's skin had been washed with iodine and draped in sterile green cotton sheets. The instrument tables were laid out with hundreds of stainless steel surgical tools lined up in their proper places and ready to go. The nurses had performed their part of the miracle.

The nurses then helped us into our sterile gowns and gloves and tied them behind us. Thomas and I started to step to the same side of the table. I wanted to do the case, and Thomas obviously thought he was going to. We hadn't discussed it. He looked at me, a flicker of annoyance in his eyes. He nodded and stepped to the second assistant's position next to me. Joe waited at the first assistant's position on the opposite side of the table. I took the surgeon's position and

held out my hand. The scrub tech slapped the knife handle into my palm, and my fingers reflexively closed over the instrument.

I made an incision from just under the rib cage, down the midline to just above her pubic bone. "That big enough for you?" I asked Thomas.

"Big surgeons make big incisions," Thomas reminded me.

Joe said nothing.

I cut deeper and carefully entered the abdominal cavity. Happily, she had a "virgin belly"—she had never been operated upon and had no scarring—so getting inside was easier for us and safer for her.

We took a few extra minutes to dry up the skin bleeding so that when we got inside there would be no confusion as to whether any blood was from internal injuries or my incision. The interns lifted the abdominal wall with retractors, and we peered inside.

Miraculously, there seemed to be no internal damage. The peritoneal cavity was free of blood, and when we looked at the inside lining of the abdominal wall, we could find no entry wounds. Then, we looked at all the solid organs—liver, spleen, and kidneys. Next we "ran the bowel," looking carefully at every inch of the fifteen feet of small intestine and six feet of colon. No injuries. All her blood loss had been external.

"Nothing. He never got the knife through her armor of fat," Joe said.

"Amazing," Thomas said.

The interns grunted. They wanted to stop pulling on the retractors and go back to the scut work on the ward that this operation had interrupted. They weren't going to be able to sleep no matter what happened here. The students, happy as they could be, were busy sewing up the skin lacerations and never gave us a glance.

"How's she doing?" I asked the anesthesia team.

The anesthesiologists are the real keepers of life during an operation. The surgeons deal with flesh and blood, while the anesthesiologists deal with living parts and vital signs.

"She's a hell of a lot better than when she got here. Pressure's up to eighty, and her pulse is coming down a bit. She's even made some urine. We're on her sixteenth unit of blood though."

"Think you should give her some fresh frozen plasma now? She's a coagulation defect waiting to happen," I asked.

"It's already been sent for. They're thawing it now," Allen said, sounding a little smug.

"Nobody loves a smart-ass, Allen," Thomas muttered. They were old close friends from college and medical school.

"Fuck you too," Allen said.

"Okay," I said, "let's close."

The interns perked up.

"You guys close, and we'll write it up," Joe told the interns.

Joe, Thomas, and I backed away from the table and stripped off our gowns and gloves. Allen stayed to manage the patient, who was still asleep. The interns took our places, each putting out a hand to the scrub nurse for sutures to close the incision.

"Don't fight, children," Thomas said. "And be sure to use stays." These were heavy wire sutures used to make a secure closure of the abdominal wall. They were painful but mandatory in such a high-risk case. If she survived the operation, we didn't want to lose her a few days later to a wound dehiscence, a separation of the abdominal wall, literally spilling her guts onto the bed.

The three of us walked out into the hall, quiet as we entered the surgeons' changing room to get back into our whites.

For the first time since the assault began, I felt shaky, perhaps because this was the first moment I had to realize what had happened. The evening began to take on a surreal feeling. I could barely remember if it all happened on the same day. Of course, by then it

was Saturday morning, but the night was still young as far as our call schedule was concerned. Still quiet, we began to remove our dirty scrub suits. Suddenly one of the students burst into the locker room, skidding at the corner, grabbing the door jamb to stop his slide.

"C'mon! We're in trouble!"

"What's up?" Joe asked. None of us thought it could be too serious. How much trouble could the boys have gotten into in five minutes?

"She's bleeding out. And she's getting shocky again."

"Fuck," we three said, almost in a chorus.

We pulled on new scrubs and raced for the OR.

"Where is she bleeding from?" Thomas asked the student as we ran.

"Beats the shit out of me. They just said to go get you guys fast."

We walked in without putting on any of the usual gear. Caps, masks, and shoe covers were niceties we had no time for at that moment.

"What's up?" Joe began but stopped when he saw what had happened.

"Oh my God!" Again, a chorus of three.

Blood was running from the right side of the base of her neck, dripping off the table, and beginning to accumulate on the floor. One of the junior residents was almost standing on the operating table trying to apply pressure to the wound at the base of the neck, just above the collarbone. Blood continued to pour out around his hands, running between his fingers and flowing down our patient's shoulders and onto the floor.

"She's bleeding from the subclavian vein," Joe said. "Keep her down, Allen; we're gonna need to open that neck and maybe her chest."

We skipped the scrub and were gloved and gowned in seconds. The small hole in her neck had looked so innocuous and hadn't

been bleeding when we left, but when she was being awakened, she coughed. She probably had blown out the clot that had formed in the entry wound to her subclavian vein, a vessel the size of a thumb beneath the collarbone. A tear in that vessel could cause a person to bleed to death in minutes, and surgical access to it was extremely difficult. Joe moved in to take over, and the three of us took our places, with me now as first assistant. We began to work in silence, no banter, no jokes. The room was quiet but for the sounds of the anesthesia machine cycling gases in and out of her lungs. Everyone's attention was directly on the operative field.

Wasting no movements, Joe opened an incision along the collarbone and put a finger deep inside and behind the bone. He couldn't feel the vein but knew where it was. He compressed it against the collarbone from inside her neck.

The bleeding slowed but didn't stop.

"Suction!" I said, "and keep us four units ahead." The scrub nurse slapped a high-volume suction into my hand, and the circulating nurse hurried away to call the blood bank.

Joe blindly moved his finger back and forth inside the wound, probing deeper, trying to cover the hole in the vessel. He worked by feel, and in a few seconds the bleeding completely stopped seeping around his finger.

"Okay. Let's get this area cleaned up and get a vascular set. Allen, how's she doing?"

"She's holding around sixty to seventy, but this is her third episode of deep shock, and she's pretty rocky. Soon as we get some volume into her, we'll see."

"Tony, I can't let go of this vessel. I think it's the vein because of the color and it's not pulsing, but with this low pressure, I'm not sure. Anyway, enlarge this incision and we'll take out the clavicle. Have you ever done that before?"

"No," I said.

Joe muttered, "Neither have I, but how hard can it be? The orthopods do it all the time, and they come from the bottom of the class."

A few students laughed, but the rest of us had heard this joke before. Joe was trying to lighten things up, but sweat beaded on his forehead. We all were sweating.

I started to enlarge the incision while Joe firmly held the vein in place. Still no bleeding.

"Remember, pal, those are my fingers next to your knife," Joe said.

"I'll keep that in mind," I said.

We found the clavicle and severed the joint at the breastbone. It didn't move. We worked on the end nearest the shoulder and divided a few ligaments. The collarbone rocked upward and out of the wound. There, in the depths, was the vessel that none of us had seen since our gross anatomy cadaver days in medical school—the injured subclavian vein. Damaging this vein was highly uncommon, and now with the pressure off the bone, she had begun to bleed again.

"Vascular clamps!" Joe said. "Not those, *those*!" He pointed with his nose.

We lost a lot more blood while we tried to get the clamps on. Each time Joe released the pressure enough to get the clamp into the hole in her neck, the blood welled up so fast we couldn't see where to place the clamp. Joe pushed with his finger against the hole in the vein. Again, the bleeding temporarily stopped. Finally, we got the collarbone out completely and put on the clamps.

"Six-zero double-armed vascular Prolene," Joe said, and began the repair with the sutures needed for this deep cut. Sewing the vein was the easy part. With the clamps in place, there was no bleeding. The tear in the vessel was easy to see and easy to repair. As with most surgery, the hardest part and the key to success was good exposure to the area.

We all took some deep breaths, watching quietly to see if the repaired vessel had any leaks. Joe removed one clamp and let the vein backfill under low pressure. Then he took off the other clamp. It stayed dry.

"Put the distal clamp back on," he said to me. "I want to see if it bleeds under pressure." A good idea. We did not want to come back in again.

"Looks okay to me. Any dissenters?" Lots of mumbling and uh-huhs.

"I think *we'd* better close this one. Right?" he said to me.

I nodded.

It took us another forty-five minutes to finish and begin to wake her up. In all, we had worked on the patient for over seven hours. By the time we were done, she had gone through thirty-seven units of blood. She was alive. We were wiped.

We collapsed in the lounge, but there was nothing to eat and no coffee. It was nearly five in the morning, and none of us wanted to go to bed only to get up an hour later for rounds, so we headed for the Sunken Gardens, the hospital cafeteria that had a late snack available for the residents. Early in our training, we had learned that when you don't sleep, it's best to keep eating. Often, we sent the students out for pizza or Chinese food, but it was too late, and we were too tired.

We all sat at one long table and gave a couple of the students money for coffee and sandwiches as we began to recap.

Thomas looked at me and said, "You could have saved us all a lot of trouble if you'd just taken that guy's knife away at the beginning."

He wasn't being intentionally cruel, just exchanging normal macho resident banter. But I was starting to wonder whether I had been a coward by not intervening. I said nothing, and Thomas must have sensed his jab had hurt because he added,

"Or you could have saved us the same trouble by tiptoeing away and leaving her there. But this . . ."

He raised his hands palms up and shrugged. A few days later at the Death and Complications Conference, we presented the case because we had, after all, failed to recognize the subclavian vein injury, and that was considered a complication. Our professor, Dr. Raymond Bernard, said, "I have nothing to add, except to congratulate Dr. Goodman on his fine judgment." I thought he was being sarcastic until he went on. "Never, *never* step into a domestic fight. You'll just get hurt. Or worse!"

At nearly seven on Saturday morning, we assembled in the intensive care unit that had only six beds, so only the most serious cases could stay long. We also had trouble fitting all the doctors into the small space. With four nurses coming off duty and four coming on and needing to be briefed, it was standing room only. The doctors' team consisted of two chief residents, two senior residents, two senior assistant residents, four junior assistant residents, and four interns. There was always a variable number of medical students, and everyone was present for the changing of the guard for the week ahead.

When we were all assembled, the interns usually told the story of each patient: their disease problem, their surgery, their progress, and the plan for the next twenty-four hours. They also went over new laboratory tests and x-rays. We had more than thirty patients in the ward still to see. This process was tedious, and the team about to go off duty was always antsy to get home. But it had to be done carefully so continuity of care would be complete and nobody got hurt because of some slipup in the transmission of information.

We moved from bed to bed. A place was always left open for the chiefs while everyone else filtered into available spaces at the bedside in accordance with how much they would participate in the

discussion. Middle-level residents often hung back and whispered in the background.

When we came to Mary's bed—by then she had a name—the oncoming team pushed a little closer. She was a new patient, and her bandages and the four intravenous lines and respirator indicated that this was not just another Saturday-night appendectomy.

This time Joe began. He spoke directly to Bill, his counterpart chief resident who would be taking over for the weekend.

"This is a thirty-seven-year-old black female who sustained multiple stab wounds of the chest, neck, abdomen, and arms by her husband last night in the tunnels between the Turkey Tower and the ER." Next came the usual back-and-forth between formal medical language and offhanded remarks, the kind of thing that did not happen when the professors were present.

"Tony was lucky enough to see it happen and not get stabbed himself. Most of the injuries were superficial, but she did get one in the right subclavian vein, which we missed first time around."

A roomful of eyebrows rose.

"We didn't find it until we were done exploring her abdomen, which was negative, and sewing up the rest of her lacerations. In fact, we were in the lounge when she crashed again. We had to take out the clavicle to get at the tear and fix it. Anyway, we went through over thirty-seven units of blood, and it was an all-nighter in the OR."

A few more low whistles and a "wow" from one or two students. The senior residents wondered how they would present the missed injury at the Death and Complication Conference.

The room was silent for a few more seconds. Bill stepped closer to the bedside. He looked over the dressings, some stained with blood, and after a pause, he turned to Joe and said quietly, "I wonder what she did to get him so mad."

Silence.

"Jesus, Bill, is that the only thing you've got to say?" Joe asked.

Bill laughed.

Later, when I repeated the story to my wife, she was horrified. "What a pig," she said. "It's worse than that. It's completely insensitive."

I was embarrassed, so I agreed with her, but the truth is, when Bill made that remark, most of us had grinned or laughed out loud. It hadn't seemed that bad at the time.

But over time it would become the focus of discussions regarding how life on the Boston City Hospital surgical service was stripping all of us of our humanity.

That day, we had just moved on to the next bed and continued rounds.

Almost exactly a month later to the day, I was back in the Turkey Tower trying to read myself to sleep. It had been a quiet Friday night. We'd had only one admission since four in the afternoon when the phone rang, and the intern said he needed me stat, an abbreviation for the Latin word *statim*, meaning at once. He hung up without elaborating, a bad sign.

I raced down the stairs and across the parking lot. I had stopped using the tunnels since that awful night, even in bad weather. I reached the ER and went straight for the trauma room since nothing but trauma could be as urgent as the intern sounded. The room was full of the usual organized confusion, with medical personnel gathered around a stretcher. A cardiac resuscitation was in progress. The patient was unconscious, and the usual plethora of IV tubes and other life support equipment was sticking out of her. The crowd stepped back from the bed, a signal that they were about to defibrillate the patient's heart. The EKG monitor was showing a ventricular

fibrillation, no blood going from the heart to the body. The resident put the electric paddles on the patient's chest. Yes, just like on television.

"Clear!" he shouted.

Everyone checked to see that they were not touching the bed or the patient. This voltage could restart the heart, but it could also stop a normal heart.

He pushed the button, and the jolt of electricity drove through the patient's heart and nervous system. The muscles contracted violently, and the patient came up off the bed in a spasm. Everyone turned toward the EKG monitor; still fibrillating, no effective heartbeat. The resident turned up the voltage another one hundred watts.

"Clear!"

He fired and again she rose off the bed. We turned to the monitor. Still no response.

Nothing. Now the monitor showed a straight line. There was no heart activity at all.

"Intracardiac epi!" he said.

The nurse already had the adrenaline in a syringe and handed him the massive dose with the three-inch needle. He felt for the space between the ribs and inserted it. He drew back on the plunger until the gush of deep-crimson blood in the syringe signaled the needle was in the heart chamber. He pushed the full dose of adrenaline into the heart and withdrew the needle. We all turned to the monitor. Nothing.

From the medical garbage scattered about the floor—empty medicine vials, bandages, and yards of EKG paper—it was obvious that the resuscitation had been going on for some time. Between medications and shocks, the interns were taking turns pumping on the chest, giving external cardiac massage to pump blood to the brain and other organs.

The anesthesia team had still been hand-pumping the oxygen bag and had stopped to open her closed eyelids.

"Pupils fixed and dilated, guys. Time to quit?"

The intern took an ophthalmoscope and peered into each eye, looking at the vessels at the back of the retina.

"Boxcars," he said.

Residents used this expression to describe the appearance of the collapsed blood vessel walls when there is no blood pressure in the retinal arterioles. The segments of blood seen between the collapsed parts look like a child's train. It was a pun, too, since the patient had just "boxed," or died.

She was now officially dead. The patient might have been dead on arrival, but she isn't considered dead until the doctor in charge of the team says so. A famous major league umpire used to say, "There's balls and there's strikes. But they ain't nuthin' till I call 'em!" And so it is with death in the hospital: they ain't dead till we call 'em.

The group started to fade from the room, leaving two nurses to restock the emergency cart and two aides to clean up the body. I started out of the room and looked at the person lying so still on the stretcher. She was nearly naked, and now for the first time, I noticed the freshly healed scars all over her body. Then I saw the large scar over the place where her right clavicle should have been. It was Mary, just one month later, and she was dead. I saw two small fresh holes—stab wounds—one on each side of her sternum, directly over the heart. She could never have survived those wounds. Her husband had learned from experience, but she had not. I later learned she had never pressed charges, and now she was dead, and all I could think—though I tried hard to drive the thought from my mind—was *I wonder what she did to get him so mad.*

I walked out into the parking lot and took a few breaths of the cold night air, and I thought, *What's happening? How did I get here? Who am I becoming?*