



EXCERPTS FROM THE BOOK

PROOF *of*
HEAVEN

*A Neurosurgeon's Journey
into the Afterlife*

EBEN ALEXANDER, M.D.

his colorful blossoming Para-Commander parachute.

I passed him going at over 150 miles per hour, or 220 feet per second. Given that speed, I doubt he saw the expression on my face. But if he had, he would have seen a look of sheer astonishment. Somehow I had reacted in microseconds to a situation that, had I actually had time to think about it, would have been much too complex for me to deal with.

And yet . . . I *had* dealt with it, and we both landed safely. It was as if, presented with a situation that required more than its usual ability to respond, my brain had become, for a moment, superpowered.

How had I done it? Over the course of my twenty-plus-year career in academic neurosurgery—of studying the brain, observing how it works, and operating on it—I have had plenty of opportunities to ponder this very question. I finally chalked it up to the fact that the brain is truly an extraordinary device: more extraordinary than we can even guess.

I realize now that the real answer to that question is much more profound. But I had to go through a complete metamorphosis of my life and worldview to glimpse that answer. This book is about the events that changed my mind on the matter. They convinced me that, as marvelous a mechanism as the brain is, it was not my brain that saved my life that day at all. What sprang into action the second Chuck's chute started to open was another, much deeper part of me. A part that could move so fast because it was not stuck in time at all, the way the brain and body are.

This was the same part of me, in fact, that had made me so homesick for the skies as a kid. It's not only the smartest part of us, but the deepest part as well, yet for most of my adult life I was unable to believe in it.

But I do believe now, and the pages that follow will tell you why.

EXCERPTS FROM THE BOOK

I'm a neurosurgeon.

I graduated from the University of North Carolina at Chapel Hill in 1976 with a major in chemistry and earned my M.D. at Duke University Medical School in 1980. During my eleven years of medical school and residency training at Duke as well as Massachusetts General Hospital and Harvard, I focused on neuroendocrinology, the study of the interactions

between the nervous system and the endocrine system—the series of glands that release the hormones that direct most of your body’s activities. I also spent two of those eleven years investigating how blood vessels in one area of the brain react pathologically when there is bleeding into it from an aneurysm—a syndrome known as cerebral vasospasm.

After completing a fellowship in cerebrovascular neurosurgery in Newcastle-Upon-Tyne in the United Kingdom, I spent fifteen years on the faculty of Harvard Medical School as an associate professor of surgery, with a specialization in neurosurgery. During those years I operated on countless patients, many of them with severe, life-threatening brain conditions.

Most of my research work involved the development of advanced technical procedures like stereotactic radiosurgery, a technique that allows surgeons to precisely guide beams of radiation to specific targets deep in the brain without affecting adjacent areas. I also helped develop magnetic resonance image-guided neurosurgical procedures instrumental in repairing hard-to-treat brain conditions like tumors and vascular disorders. During those years I also authored or coauthored more than 150 chapters and papers for peer-reviewed medical journals and presented my findings at more than two hundred medical conferences around the world.

In short, I devoted myself to science. Using the tools of modern medicine to help and to heal people, and to learn more about the workings of the human body and brain, was my life’s calling. I felt immeasurably lucky to have found it. More important, I had a beautiful wife and two lovely children, and while I was in many ways married to my work, I did not neglect my family, which I considered the other great blessing in my life. On many counts I was a very lucky man, and I knew it.

On November 10, 2008, however, at age fifty-four, my luck seemed to run out. I was struck by a rare illness and thrown into a coma for seven days. During that time, my entire neocortex—the outer surface of the brain, the part that makes us human—was shut down. Inoperative. In essence, absent.

When your brain is absent, you are absent, too. As a neurosurgeon, I'd heard many stories over the years of people who had strange experiences, usually after suffering cardiac arrest: stories of traveling to mysterious, wonderful landscapes; of talking to dead relatives—even of meeting God Himself.

Wonderful stuff, no question. But all of it, in my opinion, was pure fantasy. What caused the otherworldly types of experiences that such people so often report? I didn't claim to know, but I did know that they were brain-based. All of consciousness is. If you don't have a working brain, you can't be conscious.

This is because the brain is the machine that produces consciousness in the first place. When the machine breaks down, consciousness stops. As vastly complicated and mysterious as the actual mechanics of brain processes are, in essence the matter is as simple as that. Pull the plug and the TV goes dead. The show is over, no matter how much you might have been enjoying it.

Or so I would have told you before my own brain crashed.

During my coma my brain wasn't working improperly—it wasn't working *at all*. I now believe that this might have been what was responsible for the depth and intensity of the near-death experience (NDE) that I myself underwent during it. Many of the NDEs reported happen when a person's heart has shut down for a while. In those cases, the neocortex is temporarily inactivated, but generally not too damaged, provided that the flow of oxygenated blood is restored through cardiopulmonary resuscitation or reactivation of cardiac function within four minutes or so. But in my case, the neocortex was out of the picture. I was encountering the reality of a world of consciousness that existed *completely free of the limitations of my physical brain*.

Mine was in some ways a perfect storm of near-death experiences. As a practicing neurosurgeon with decades of research and hands-on work in the operating room behind me, I was in a better-than-average position to judge not only the reality but also the *implications* of what happened to me.

Those implications are tremendous beyond description. My experience

showed me that the death of the body and the brain are not the end of consciousness, that human experience continues beyond the grave. More important, it continues under the gaze of a God who loves and cares about each one of us and about where the universe itself and all the beings within it are ultimately going.

The place I went was real. Real in a way that makes the life we're living here and now completely dreamlike by comparison. This doesn't mean I don't value the life I'm living now, however. In fact, I value it more than I ever did before. I do so because I now see it in its true context.

This life isn't meaningless. But we can't see that fact from here—at least most of the time. What happened to me while I was in that coma is hands-down the most important story I will ever tell. But it's a tricky story to tell because it is so foreign to ordinary understanding. I can't simply shout it from the rooftops. At the same time, my conclusions are based on a medical analysis of my experience, and on my familiarity with the most advanced concepts in brain science and consciousness studies. Once I realized the truth behind my journey, I knew I *had* to tell it. Doing so properly has become the chief task of my life.

That's not to say I've abandoned my medical work and my life as a neurosurgeon. But now that I have been privileged to understand that our life does not end with the death of the body or the brain, I see it as my duty, my calling, to tell people about what I saw beyond the body and beyond this earth. I am especially eager to tell my story to the people who might have heard stories similar to mine before and wanted to believe them, but had not been able to fully do so.

It is to these people, more than any other, that I direct this book, and the message within it. What I have to tell you is as important as anything anyone will ever tell you, and it's true.

The Pain

Lynchburg, Virginia—November 10, 2008

My eyes popped open. In the darkness of our bedroom, I focused on the red glow of the bedside clock: 4:30 A.M.—an hour before I'd usually wake up for the seventy-minute drive from our house in Lynchburg, Virginia, to the Focused Ultrasound Surgery Foundation in Charlottesville where I worked. My wife, Holley, was still sleeping soundly beside me.

After spending almost twenty years in academic neurosurgery in the greater Boston area, I'd moved with Holley and the rest of our family to the highlands of Virginia two years earlier, in 2006. Holley and I met in October 1977, two years after both of us had left college. Holley was working toward her masters in fine arts, and I was in medical school. She'd been on a couple of dates with my college roommate, Vic. One day, he brought her by to meet me—probably to show her off. As they were leaving, I told Holley to come back anytime, adding that she shouldn't feel obliged to bring Vic.

On our first true date, we drove to a party in Charlotte, North Carolina, two and a half hours each way by car. Holley had laryngitis so I had to do 99 percent of the talking both ways. It was easy. We were married in June 1980 at St Thomas's Episcopal Church in Windsor, North Carolina, and soon after moved into the Royal Oaks apartments in Durham, where I was a resident in surgery at Duke. Our place was far from royal, and I don't recall spotting any oaks there, either. We had very little money but we were both so busy—and so happy to be together—that we didn't care. One of our first vacations was a springtime camping tour of North Carolina's beaches. Spring is no-see-um (the biting midge) bug season in the Carolinas, and our tent didn't offer much protection from them. We

had plenty of fun just the same. Swimming in the surf one afternoon at Ocracoke, I devised a way to catch the blue-shell crabs that were scuttling about at my feet. We took a big batch over to the Pony Island Motel, where some friends were staying, and cooked them up on a grill. There was plenty to share with everyone. Despite all our cutting corners, it wasn't long till we found ourselves distressingly low on cash. We were staying with our best friends Bill and Patty Wilson, and, on a whim, decided to accompany them to a night of bingo. Bill had been going every Thursday of every summer for ten years and he had never won. It was Holley's first time playing bingo. Call it beginner's luck, or divine intervention, but she won two hundred dollars—which felt like five thousand dollars to us. The cash extended our trip and made it much more relaxed.

I earned my M.D. in 1980, just as Holley earned her degree and began a career as an artist and teacher. I performed my first solo brain surgery at Duke in 1981. Our firstborn, Eben IV, was born in 1987 at the Princess Mary Maternity Hospital in Newcastle-Upon-Tyne in northern England during my cerebrovascular fellowship, and our younger son, Bond, was born at the Brigham & Women's Hospital in Boston in 1998.

I loved my fifteen years working at Harvard Medical School and Brigham & Women's Hospital. Our family treasured those years in the Greater Boston area. But, in 2005 Holley and I agreed it was time to move back to the South. We wanted to be closer to our families, and I saw it as an opportunity to have a bit more autonomy than I'd had at Harvard. So in the spring of 2006, we started anew in Lynchburg, in the highlands of Virginia. It didn't take long for us to settle back into the more relaxed life we'd both enjoyed growing up in the South.

For a moment I just lay there, vaguely trying to zero in on what had awakened me. The previous day—a Sunday—had been sunny, clear, and just a little crisp—classic late autumn Virginia weather. Holley, Bond (ten years old at the time), and I had gone to a barbecue at the home of a neighbor. In the evening we had spoken by phone to our son Eben IV

(then twenty), who was a junior at the University of Delaware. The only hitch in the day had been the mild respiratory virus that Holley, Bond, and I were all still dragging around from the previous week. My back had started aching just before bedtime, so I'd taken a quick bath, which seemed to drive the pain into submission. I wondered if I had awakened so early this morning because the virus was still lurking in my body.

I shifted slightly in bed and a wave of pain shot down my spine—far more intense than the night before. Clearly the flu virus was still hanging on, and then some. The more I awoke, the worse the pain became. Since I wasn't able to fall back to sleep and had an hour to spend before my workday started, I decided on another warm bath. I sat up in bed, swung my feet to the floor, and stood up.

Instantly the pain ratcheted up another notch—a dull, punishing throb penetrating deeply at the base of my spine. Leaving Holley asleep, I padded gingerly down the hall to the main upstairs bathroom.

I ran some water and eased myself into the tub, pretty certain that the warmth would instantly do some good. Wrong. By the time the tub was half full, I knew that I'd made a mistake. Not only was the pain getting worse, but it was also so intense now that I feared I might have to shout for Holley to help me get out of the tub.

Thinking how ridiculous the situation had become, I reached up and grabbed a towel hanging from a rack directly above me. I edged the towel over to the side of the rack so that the rack would be less likely to break loose from the wall and gently pulled myself up.

Another jolt of pain shot down my back, so intense that I gasped. This was definitely *not* the flu. But what else could it be? After struggling out of the slippery tub and into my scarlet terry-cloth bathrobe, I slowly made my way back to our bedroom and flopped down on our bed. My body was already damp again from cold sweat.

Holley stirred and turned over.

“What's going on? What time is it?”

“I don't know,” I said. “My back. I am in serious pain.”

Holley began rubbing my back. To my surprise it made me feel a little better. Doctors, by and large, don't take kindly to being sick. I'm no

exception. For a moment I was convinced the pain—and whatever was causing it—would finally start to recede. But by 6:30 A.M., the time I usually left for work, I was still in agony and virtually paralyzed.

Bond came into our bedroom at 7:30, curious as to why I was still at home.

“What’s going on?”

“Your father doesn’t feel well, honey,” Holley said.

I was still lying on the bed with my head propped up on a pillow. Bond came over, reached out, and began to massage my temples gently.

His touch sent what felt like a lightning bolt through my head—the worst pain yet. I screamed. Surprised by my reaction, Bond jumped back.

“It’s okay,” Holley said to Bond, clearly thinking otherwise. “It’s nothing you did. Dad has a horrible headache.” Then I heard her say, more to herself than to me: “I wonder if I should call an ambulance.”

If there’s one thing doctors hate even more than being sick, it’s being in the emergency room as a patient. I pictured the house filling up with EMTs, the retinue of stock questions, the ride to the hospital, the paperwork . . . I thought at some point I would begin to feel better and regret calling an ambulance in the first place.

“No, it’s okay,” I said. “It’s bad now but it’s bound to get better soon. You should probably help Bond get ready for school.”

“Eben, I really think—”

“I’ll be fine,” I interrupted, my face still buried in the pillow. I was still paralyzed by the pain. “Seriously, do *not* call nine-one-one. I’m not that sick. It’s just a muscle spasm in my lower back, and a headache.”

Reluctantly, Holley took Bond downstairs and fed him some breakfast before sending him up the street to a friend’s house to catch a ride to school. As Bond was going out the front door, the thought occurred to me that if this was something serious and I *did* end up in the hospital, I might not see him after school that afternoon. I mustered all my energy and croaked out, “Have a good day at school, Bond.”

By the time Holley came back upstairs to check on me, I was slipping into unconsciousness. Thinking I was napping, she left me to rest and went downstairs to call some of my colleagues, hoping to get their

opinions on what might be happening.

Two hours later, feeling she'd let me rest long enough, she came back to check on me. Pushing open our bedroom door, she saw me lying in bed just as before. But looking closer, she saw that my body wasn't relaxed as it had been, but rigid as a board. She turned on the light and saw that I was jerking violently. My lower jaw was jutting forward unnaturally, and my eyes were open and rolling back in my head.

"Eben, say something!" Holley screamed. When I didn't respond, she called nine-one-one. It took the EMTs less than ten minutes to arrive, and they quickly loaded me into an ambulance bound for the Lynchburg General Hospital emergency room.

Had I been conscious, I could have told Holley exactly what I was undergoing there on the bed during those terrifying moments she spent waiting for the ambulance: a full *grand mal* seizure, brought on, no doubt, by some kind of extremely severe shock to my brain.

But of course, I was not able to do that.

For the next seven days, I would be present to Holley and the rest of my family in body alone. I remember nothing of this world during that week and have had to glean from others those parts of this story that occurred during the time I was unconscious. My mind, my spirit—whatever you may choose to call the central, human part of me—was gone.

The Hospital

The Lynchburg General Hospital emergency room is the second-busiest ER in the state of Virginia and is typically in full swing by 9:30 on a weekday morning. That Monday was no exception. Though I spent most of my workdays in Charlottesville, I'd logged plenty of operating time at Lynchburg General, and I knew just about everyone there.

Laura Potter, an ER physician I'd known and worked with closely for almost two years, received the call from the ambulance that a fifty-four-year-old Caucasian male, in *status epilepticus*, was about to arrive in her ER. As she headed down to the ambulance entrance, she ran over the list of possible causes for the incoming patient's condition. It was the same list that I'd have come up with if I had been in her shoes: alcohol withdrawal; drug overdose; hyponatremia (abnormally low sodium level in the blood); stroke; metastatic or primary brain tumor; intraparenchymal hemorrhage (bleeding into the substance of the brain); brain abscess . . . and meningitis.

When the EMTs wheeled me into Major Bay 1 of the ER, I was still convulsing violently, while intermittently groaning and flailing my arms and legs.

It was obvious to Dr. Potter from the way I was raving and writhing around that my brain was under heavy attack. A nurse brought over a crash cart, another drew blood, and a third replaced the first, now empty, intravenous bag that the EMTs had set up at our house before loading me into the ambulance. As they went to work on me, I was squirming like a six-foot fish pulled out of the water. I spouted bursts of garbled, nonsensical sounds and animal-like cries. Just as troubling to Laura as the seizures was that I seemed to show an asymmetry in the motor control of my body. That could mean that not only was my brain under attack but that serious and possibly irreversible brain damage was already under

way.

The sight of any patient in such a state takes getting used to, but Laura had seen it all in her many years in the ER. She had never seen one of her fellow physicians delivered into the ER in this condition, however, and looking closer at the contorted, shouting patient on the gurney, she said, almost to herself, “Eben.”

Then, more loudly, alerting the other doctors and nurses in the area: “This is Eben Alexander.”

Nearby staff who heard her gathered around my stretcher. Holley, who’d been following the ambulance, joined the crowd while Laura reeled off the obligatory questions about the most obvious possible causes for someone in my condition. Was I withdrawing from alcohol? Had I recently ingested any strong hallucinogenic street drugs? Then she went to work trying to bring my seizures to a halt.

In recent months, Eben IV had been putting me through a vigorous conditioning program for a planned father-son climb up Ecuador’s 19,300-foot Mount Cotopaxi, which he had climbed the previous February. The program had increased my strength considerably, making it that much more difficult for the orderlies trying to hold me down. Five minutes and 15 milligrams of intravenous diazepam later, I was still delirious and still trying to fight everyone off, but to Dr. Potter’s relief I was at least now fighting with both sides of my body. Holley told Laura about the severe headache I’d been having before I went into seizure, which prompted Dr. Potter to perform a lumbar puncture—a procedure in which a small amount of cerebrospinal fluid is extracted from the base of the spine.

Cerebrospinal fluid is a clear, watery substance that runs along the surface of the spinal cord and coats the brain, cushioning it from impacts. A normal, healthy human body produces about a pint of it a day, and any diminishment in the clarity of the fluid indicates that an infection or hemorrhage has occurred.

Such an infection is called meningitis: the swelling of the meninges, the membranes that line the inside of the spine and skull and that are in direct contact with the cerebrospinal fluid. In four cases out of five a

virus causes the disease. Viral meningitis can make a patient quite ill, but it is only fatal in approximately 1 percent of cases. In one case out of five, however, bacteria cause meningitis. Bacteria, being more primitive than viruses, can be a more dangerous foe. Cases of bacterial meningitis are uniformly fatal if untreated. Even when treated rapidly with the appropriate antibiotics, the mortality rate ranges from 15 to 40 percent.

One of the least likely culprits for bacterial meningitis in adults is a very old and very tough bacteria named *Escherichia coli*—better known simply as *E. coli*. No one knows how old *E. coli* is precisely, but estimates hover between three and four billion years. The organism has no nucleus and reproduces by the primitive but extremely efficient process known as asexual binary fission (in other words, by splitting in two). Imagine a cell filled, essentially, with DNA, that can take in nutrients (usually from other cells that it attacks and absorbs) directly through its cellular wall. Then imagine that it can simultaneously copy several strands of DNA and split into two daughter cells every twenty minutes or so. In an hour, you'll have 8 of them. In twelve hours, 69 billion. By hour fifteen, you'll have 35 trillion. This explosive growth only slows when its food begins to run out.

E. coli are also highly promiscuous. They can trade genes with other bacterial species through a process called bacterial conjugation, which allows an *E. coli* cell to rapidly pick up new traits (such as resistance to a new antibiotic) when needed. This basic recipe for success has kept *E. coli* on the planet since the earliest days of unicellular life. We all have *E. coli* bacteria residing within us—mostly in our gastrointestinal tract. Under normal conditions, this poses no threat to us. But when varieties of *E. coli* that have picked up DNA strands that make them especially aggressive invade the cerebrospinal fluid around the spinal cord and brain, the primitive cells immediately begin devouring the glucose in the fluid, and whatever else is available to consume, including the brain itself.

No one in the ER, at that point, thought I had *E. coli* meningitis. They had no reason to suspect it. The disease is astronomically rare in adults. Newborns are the most common victims, but cases of babies any older

than three months having it are exceedingly uncommon. Fewer than one in 10 million adults contract it spontaneously each year.

In cases of bacterial meningitis, the bacteria attack the outer layer of the brain, or cortex, first. The word *cortex* derives from a Latin word meaning “rind” or “bark.” If you picture an orange, its rind is a pretty good model for the way the cortex surrounds the more primitive sections of the brain. The cortex is responsible for memory, language, emotion, visual and auditory awareness, and logic. So when an organism like *E. coli* attacks the brain, the initial damage is to the areas that perform the functions most crucial to maintaining our human qualities. Many victims of bacterial meningitis die in the first several days of their illness. Of those who arrive in an emergency room with a rapid downward spiral in neurologic function, as I did, only 10 percent are lucky enough to survive. However, their luck is limited, as many of them will spend the rest of their lives in a vegetative state.

Though she didn't suspect *E. coli* meningitis, Dr. Potter thought I might have *some* kind of brain infection, which is why she decided on the lumbar puncture. Just as she was telling one of the nurses to bring her a lumbar puncture tray and prepare me for the procedure, my body surged up as if my gurney had been electrified. With a fresh blast of energy, I let out a long, agonized groan, arched my back, and flailed my arms at the air. My face was red, and the veins in my neck bulged out crazily. Laura shouted for more help, and soon two, then four, and finally six attendants were struggling to hold me down for the procedure. They forced my body into a fetal position while Laura administered more sedatives. Finally, they were able to make me still enough for the needle to penetrate the base of my spine.

When bacteria attack, the body goes immediately into defense mode, sending shock troops of white blood cells from their barracks in the spleen and bone marrow to fight off the invaders. They're the first casualties in the massive cellular war that happens whenever a foreign biological agent invades the body, and Dr. Potter knew that any lack of clarity in my cerebrospinal fluid would be caused by my white blood cells.

Dr. Potter bent over and focused on the manometer, the transparent vertical tube into which the cerebrospinal fluid would emerge. Laura's first surprise was that the fluid didn't drip but gushed out—due to dangerously high pressure.

Her second surprise was the fluid's appearance. The slightest opacity would tell her I was in deep trouble. What shot out into the manometer was viscous and white, with a subtle tinge of green.

My spinal fluid was full of pus.

Out of Nowhere

Dr. Potter paged Dr. Robert Brennan, one of her associates at Lynchburg General and a specialist in infectious disease. While they waited for more test results to come from the adjacent labs, they considered all of the diagnostic possibilities and therapeutic options.

Minute by minute, as the test results came back, I continued to groan and squirm beneath the straps on my gurney. An ever more baffling picture was emerging. The Gram's stain (a chemical test, named after a Danish physician who invented the method, that allows doctors to classify an invading bacteria as either gram-negative or gram-positive) came back indicating gram-negative rods—which was highly unusual.

Meanwhile a computerized tomography (CT) scan of my head showed that the meningeal lining of my brain was dangerously swollen and inflamed. A breathing tube was put into my trachea, allowing a ventilator to take over the job of breathing for me—twelve breaths a minute, exactly—and a battery of monitors was set up around my bed to record every movement within my body and my now all-but-destroyed brain.

Of the very few adults who contract spontaneous *E. coli* bacterial meningitis (that is, without brain surgery or penetrating head trauma) each year, most do so because of some tangible cause, such as a deficiency in their immune system (often caused by HIV or AIDS). But I had no such factor that would have made me susceptible to the disease. Other bacteria might cause meningitis by invading from the adjacent nasal sinuses or middle ear, but not *E. coli*. The cerebrospinal space is too well sealed off from the rest of the body for that to happen. Unless the spine or skull is punctured (by a contaminated deep brain stimulator or a shunt installed by a neurosurgeon, for example), bacteria like *E. coli* that usually reside in the gut simply have no access to that area. I had installed hundreds of shunts and stimulators in the brains of patients

myself, and had I been able to discuss the matter, I would have agreed with my stumped doctors that, to put it simply, I had a disease that was virtually impossible for me to have.

Still unable to completely accept the evidence being presented from the test results, the two doctors placed calls to experts in infectious disease at major academic medical centers. Everyone agreed that the results pointed to only one possible diagnosis.

But contracting a case of severe *E. coli* bacterial meningitis out of thin air was not the only strange medical feat I performed that first day in the hospital. In the final moments before leaving the emergency room, and after two straight hours of guttural animal wails and groaning, I became quiet. Then, out of nowhere, I shouted three words. They were crystal clear, and heard by all the doctors and nurses present, as well as by Holley, who stood a few paces away, just on the other side of the curtain.

“God, help me!”

Everyone rushed over to the stretcher. By the time they got to me, I was completely unresponsive.

I have no memory of my time in the ER, including those three words I shouted out. But they were the last I would speak for the next seven days.

Eben IV

Once in Major Bay 1, I continued to decline. The cerebrospinal fluid (CSF) glucose level of a normal healthy person is around 80 milligrams per deciliter. An extremely sick person in imminent danger of dying from bacterial meningitis can have a level as low as 20 mg/dl.

I had a CSF glucose level of 1. My Glasgow Coma Scale was eight out of fifteen, indicative of a severe brain illness, and declined further over the next few days. My APACHE II score (Acute Physiology and Chronic Health Evaluation) in the ER was 18 out of a possible 71, indicating that the chances of my dying during that hospitalization were about 30 percent. More specifically, given my diagnosis of acute gram-negative bacterial meningitis and rapid neurological decline at the outset, I'd had, at best, only about a 10 percent chance of surviving my illness when I was admitted to the ER. If the antibiotics didn't kick in, the risk of mortality would rise steadily over the next few days—till it hit a nonnegotiable 100 percent.

The doctors loaded my body with three powerful intravenous antibiotics before sending me up to my new home: a large private room, number 10, in the Medical Intensive Care Unit, one floor above the ER.

I'd been in these ICUs many times as a surgeon. They are where the absolute sickest patients, people just inches from death, are placed, so that several medical personnel can work on them simultaneously. A team like that, fighting in complete coordination to keep a patient alive when all the odds are against them, is an awesome sight. I had felt both enormous pride and brutal disappointment in those rooms, depending on whether the patient we were struggling to save either made it or slipped from our fingers.

Dr. Brennan and the rest of the doctors stayed as upbeat with Holley as they could, given the circumstances. This didn't allow for their being at

all upbeat. The truth was that I was at significant risk of dying, very soon. Even if I didn't die, the bacteria attacking my brain had probably already devoured enough of my cortex to compromise any higher-brain activity. The longer I stayed in coma, the more likely it became that I would spend the rest of my life in a chronic vegetative state.

Fortunately, not only the staff of Lynchburg General but other people, too, were already gathering to help. Michael Sullivan, our neighbor and the rector in our Episcopal church, arrived at the ER about an hour after Holley. Just as Holley had run out the door to follow the ambulance, her cell phone had buzzed. It was her longtime friend Sylvia White. Sylvia always had an uncanny way of reaching out precisely when important things were happening. Holley was convinced she was psychic. (I had opted for the safer and more sensible explanation that she was just a very good guesser.) Holley briefed Sylvia on what was happening, and between them they made calls to my immediate family: my younger sister, Betsy, who lived nearby, my sister Phyllis, at forty-eight the youngest of us, who was living in Boston, and Jean, the oldest.

That Monday morning Jean was driving south through Virginia from her home in Delaware. Fortuitously, she was on her way to help our mother, who lived in Winston-Salem. Jean's cell phone rang. It was her husband, David.

"Have you gone through Richmond yet?" he asked.

"No," Jean said. "I'm just north of it on I-95."

"Get onto route 60 West, then route 24 down to Lynchburg. Holley just called. Eben's in the emergency room there. He had a seizure this morning and isn't responding."

"Oh, my God! Do they have any idea why?"

"They're not sure, but it might be meningitis."

Jean made the turn just in time and followed the undulating two-lane blacktop of 60 West through low, scudding clouds, toward Route 24 and Lynchburg.

It was Phyllis who, at three o'clock that first afternoon of the emergency, called Eben IV at his apartment at the University of Delaware. Eben was outside on his porch doing some science homework

(my own dad had been a neurosurgeon, and Eben was interested in that career now as well) when his phone rang. Phyllis gave him a quick rundown of the situation and told him not to worry—that the doctors had everything under control.

“Do they have any idea what it might be?” Eben asked.

“Well, they did mention gram-negative bacteria and meningitis.”

“I have two exams in the next few days, so I’m going to leave some quick messages with my teachers,” said Eben.

Eben later told me that, initially, he was hesitant to believe that I was in as grave danger as Phyllis had indicated, since she and Holley always “blew things out of proportion”—*and* I never got sick. But when Michael Sullivan called him on the phone an hour later, he realized that he needed to make the drive down—*immediately*.

As Eben drove toward Virginia, an icy pelting rain started up. Phyllis had left Boston at six o’clock, and as Eben headed toward the I-495 bridge over the Potomac River into Virginia, she was passing through the clouds overhead. She landed at Richmond, rented a car, and got onto Route 60 herself.

When he was just a few miles outside Lynchburg, Eben called Holley.

“How’s Bond?” he asked.

“Asleep,” Holley said.

“I’m going to go straight to the hospital then,” Eben said.

“You sure you don’t want to come home first?”

“No,” Eben said. “I just want to see Dad.”

Eben pulled up at the Medical Intensive Care Unit at 11:15 P.M. The walkway into the hospital was starting to ice over, and when he came into the bright lights of the reception area he saw only a night reception nurse. She led him to my ICU bed.

By that point, everyone who had been there earlier had finally gone home. The only sounds in the large, dimly lit room were the quiet beeps and hisses of the machines keeping my body going.

Eben froze in the doorway when he saw me. In his twenty years, he’d never seen me with more than a cold. Now, in spite of all the machines doing their best to make it seem otherwise, he was looking at what he

knew was, essentially, a corpse. My physical body was there in front of him, but the dad he knew was gone.

Or perhaps a better word to use is: elsewhere.

An Anchor to Life

Phyllis pulled into the hospital parking lot just under two hours after Eben IV had, at around 1 A.M. When she got to my ICU room she found Eben IV sitting next to my bed, clutching a hospital pillow in front of him to help him keep awake.

“Mom’s home with Bond,” Eben said, in a tone that was tired, tense, and happy to see her, all at once.

Phyllis told Eben he needed to go home, that if he stayed up all night after driving from Delaware he’d be worthless to anyone tomorrow, his dad included. She called Holley and Jean at our house and told them Eben IV would be back soon but that she was staying in my room for the night.

“Go home to your mom and your aunt and your brother,” she said to Eben IV when she’d hung up. “They need you. Your dad and I will be right here when you get back tomorrow.”

Eben IV looked over at my body: at the clear plastic breathing tube running through my right nostril down to my trachea; at my thin, already chapping lips; at my closed eyes and sagging facial muscles.

Phyllis read his thoughts.

“Go home, Eben. Try not to worry. Your dad’s still with us. And I’m not going to let him go.”

She walked to my bedside, picked up my hand, and started to massage it. With only the machines and the night nurse who came in to check my stats every hour for company, Phyllis sat through the rest of the night, holding my hand, keeping a connection going that she knew full well was vital if I was going to get through this.

It’s a cliché to talk about what a big emphasis people in the South put on family, but like a lot of clichés, it’s also true. When I went to Harvard in 1988, one of the first things I noticed about northerners was the way they were a little shy about expressing a fact that many in the South

take for granted: Your family is *who you are*.

Throughout my own life, my relationship with my family—with my parents and sisters, and later with Holley, Eben IV, and Bond—had always been a vital source of strength and stability, but even more so in recent years. Family was where I turned for unquestioning support in a world that—North or South—can all too often be short of this commodity.

I went to our Episcopal church with Holley and the kids on occasion. But the fact was that for years I'd only been a step above a "C & E'er" (one who only darkens the door of a church at Christmas and Easter). I encouraged our boys to say their prayers at night, but I was no spiritual leader in our home. I'd never escaped my feelings of doubt at how any of it could really *be*. As much as I'd grown up wanting to believe in God and Heaven and an afterlife, my decades in the rigorous scientific world of academic neurosurgery had profoundly called into question how such things could exist. Modern neuroscience dictates that the brain gives rise to consciousness—to the mind, to the soul, to the spirit, to whatever you choose to call that invisible, intangible part of us that truly makes us who we are—and I had little doubt that it was correct.

Like most health-care workers who deal directly with dying patients and their families, I had heard about—and even seen—some pretty inexplicable events over the years. I filed those occurrences under "unknown" and let them be, figuring a commonsense answer of one kind or another lay at the heart of them all.

Not that I was opposed to supernatural beliefs. As a doctor who saw incredible physical and emotional suffering on a regular basis, the last thing I would have wanted to do was to deny anyone the comfort and hope that faith provided. In fact, I would have loved to have enjoyed some of it myself.

The older I got, however, the less likely that seemed. Like an ocean wearing away a beach, over the years my scientific worldview gently but steadily undermined my ability to believe in something larger. Science seemed to be providing a steady onslaught of evidence that pushed our significance in the universe ever closer to zero. Belief would have been

nice. But science is not concerned with what would be nice. It's concerned with what *is*.

I'm a kinetic learner, which is just to say that I learn by doing. If I can't feel something or touch it myself, it's hard for me to take interest in it. That desire to reach out and touch whatever I'm trying to understand was, along with the desire to be like my father, what drew me to neurosurgery. As abstract and mysterious as the human brain is, it's also incredibly concrete. As a medical student at Duke, I relished looking into a microscope and actually seeing the delicately elongated neuronal cells that spark the synaptic connections that give rise to consciousness. I loved the combination of abstract knowledge and total physicality that brain surgery presented. To access the brain, one must pull away the layers of skin and tissue covering the skull and apply a high-speed pneumatic device called a Midas Rex drill. It's a very sophisticated piece of equipment, costing thousands of dollars. Yet when you get down to it, it's also just . . . a drill.

Likewise, surgically repairing the brain, while an extraordinarily complex undertaking, is actually no different than fixing any other highly delicate, electrically charged machine. That, I knew full well, is what the brain really is: a machine that produces the phenomenon of consciousness. Sure, scientists hadn't discovered exactly how the neurons of the brain managed to do this, but it was only a matter of time before they would. This was proven every day in the operating room. A patient comes in with headaches and diminished consciousness. You obtain an MRI (magnetic resonance image) of her brain and discover a tumor. You place the patient under general anesthesia, remove the tumor, and a few hours later she's waking up to the world again. No more headaches. No more trouble with consciousness. Seemingly pretty simple.

I adored that simplicity—the absolute honesty and *cleanness* of science. I respected that it left no room for fantasy or for sloppy thinking. If a fact could be established as tangible and trustworthy, it was accepted. If not, then it was rejected.

This approach left very little room for the soul and the spirit, for the continuing existence of a personality after the brain that supported it

stopped functioning. It left even less room for those words I'd heard in church again and again: "life everlasting."

Which is why I counted on my family—on Holley and our boys and my three sisters and, of course, my mom and dad—so much. In a very real sense, I'd never have been able to practice my profession—to perform, day in and day out, the actions I performed, and to see the things I saw—without the bedrock support of love and understanding they provided.

And that was why Phyllis (after consulting our sister Betsy on the phone) decided that night to make a promise to me on behalf of our whole family. As she sat there with my limp, nearly lifeless hand in hers, she told me that no matter what happened from then on, someone would always be right there, holding my hand.

"We are not letting you go, Eben," she said. "You need an anchor to keep you here, in this world, where we need you. And we'll provide it."

Little did she know just how important that anchor was going to prove in the days to come.

Wednesday

For two days, “Wednesday” had been the buzzword—the day on my doctors’ lips when it came to describing my chances. As in: “We hope to see some improvement by Wednesday.” And now here Wednesday was, without so much as a glimmer of change in my condition.

“When can I see Dad?”

This question—the natural one for a ten-year-old whose father is in the hospital—had been coming from Bond regularly since I had gone into a coma on Monday. Holley had been fending it off successfully for two days, but on Wednesday morning, she decided it was time to address it.

When Holley had told Bond, on Monday night, that I wasn’t home from the hospital yet because I was “sick,” he conjured what that word had always meant to him, up to this point in his ten years of life: a cough, a sore throat—maybe a headache. Granted, his appreciation of just how much a headache can actually hurt had been greatly expanded by what he’d seen on Monday morning. But when Holley finally brought him to the hospital that Wednesday afternoon, he was still hoping to be greeted by something very different from what he saw in my hospital bed.

Bond saw a body that already bore only a distant resemblance to what he knew as his father. When someone is sleeping, you can look at them and tell there’s still a person inhabiting the body. There’s a presence. But most doctors will tell you it’s different when a person is in a coma (even if they can’t tell you exactly why). The body is there, but there’s a strange, almost physical sensation that the person is missing. That their essence, inexplicably, is somewhere else.

Eben IV and Bond had always been very close, ever since Eben ran into the delivery suite when Bond was only minutes old to hug his brand new brother. Eben met Bond at the hospital that third day of my coma and did what he could to frame the situation positively for his younger

brother. And, being hardly more than a boy himself, he came up with a scenario he thought Bond would be able to appreciate: a battle.

“Let’s make a picture of what’s going on so Dad will see it when he gets better,” he said to Bond.

So on a table in the hospital dining area, they laid out a big sheet of orange paper and drew a representation of what was happening inside my comatose body. They drew my white blood cells, wearing capes and armed with swords, defending the besieged territory of my brain. And, armed with their own swords and slightly different uniforms, they drew the invading *E. coli*. There was hand-to-hand combat, and the bodies of the slain on both sides were scattered about.

It was an accurate enough representation, in its way. The only thing about it that was inaccurate, taking into account the simplification of the obviously more complex event going on inside my body, was the way the battle was going. In Eben and Bond’s rendition, the battle was pitched and at a white heat, with both sides struggling and the outcome uncertain—though, of course, the white blood cells would eventually win. But as he sat with Bond, colored markers spread out on the table, trying to share in this naïve version of events, Eben knew that in truth, the battle was no longer pitched, or so uncertain.

And he knew which side was winning.

The Well

Holley first met our friend Sylvia in the 1980s, when both were teaching at the Ravenscroft School in Raleigh, North Carolina. While there, Holley was also a close friend of Susan Reintjes. Susan is an intuitive—a fact that never got in the way of my feelings about her. She was, to my mind, a very special person, even if what she did was, to say the least, outside my straight-and-narrow neurosurgical view. She was also a channel and had written a book called *Third Eye Open*, which Holley was a big fan of. One of the spiritual healing activities Susan regularly performed involved helping coma patients to heal by contacting them psychically. On Thursday, my fourth day in coma, Sylvia had the idea that Susan should try to contact me.

Sylvia called her at home in Chapel Hill and explained what was happening with me. Would it be possible for her to “tune in” to me? Susan said yes and asked for a few details about my illness. Sylvia gave her the basics: I’d been in a coma for four days and I was in critical condition.

“That’s all I need to know,” Susan said. “I’ll try to contact him tonight.”

According to Susan’s view, a coma patient was a kind of in-between being. Neither completely here (the earthly realm) nor completely there (the spiritual realm), these patients often have a singularly mysterious atmosphere to them. This was, as I’ve mentioned, a phenomenon I’d noticed myself many times, though of course I’d never given it the supernatural credence that Susan had.

In Susan’s experience, one of the qualities that set coma patients apart was their receptivity to telepathic communication. She was confident that once she’d put herself into a meditative state, she’d soon establish contact with me.

“Communicating with a coma patient,” she later told me, “is a little like throwing a rope down a deep well. How deep the rope needs to go depends on the depth of the comatose state. When I tried to contact you, the first thing that surprised me was how deep the rope went. The farther down, the more frightened I became that you were too far away—that I wouldn’t be able to reach you because you weren’t coming back.”

After five full minutes of mentally descending via the telepathic “rope,” she felt a slight shift, like a fishing line deep down in the water getting a small but definite tug.

“I was sure it was you,” she told me later, “and I told Holley as much. I told her it wasn’t your time yet, and that your body would know what to do. I suggested that Holley keep those two thoughts in mind, and repeat them to you at your bedside.”

N of 1

It was Thursday when my doctors determined that my particular strain of *E. coli* didn't match the ultraresistant strain that, unaccountably, had shown up in Israel just at the time I'd been there. But the fact that it didn't match only made my case more confounding. While it was certainly good news that I was not harboring a strain of bacteria that could wipe out a third of the country, in terms of my own, individual recovery, it just underscored what my doctors were already suspecting all too clearly: that my case was essentially without precedent.

It was also quickly moving from desperate to hopeless. The doctors simply didn't have an answer for how I could have contracted my illness, or how I could be brought back from my coma. They were sure of only one thing: they did not know of anyone making a full recovery from bacterial meningitis after being comatose for more than a few days. We were now into day four.

The stress took its toll on everyone. Phyllis and Betsy had decided on Tuesday that any talk of the possibility of my dying would be forbidden in my presence, under the assumption that some part of me might be aware of the discussion. Early Thursday morning, Jean asked one of the nurses in the ICU room about my chances of survival. Betsy, on the other side of my bed, heard her and said: "*Please* don't have that conversation in this room."

Jean and I had always been extremely close. We were part of the family just like our "homegrown" siblings, but the fact that we were "chosen" by mom and dad, as they put it, inevitably gave us a special bond. She had always watched out for me, and her frustration at her powerlessness over the current situation brought her close to a breaking point.

Tears came to Jean's eyes. "I need to go home for a while," she said.

After determining that there were plenty of people to continue my bedside vigil, all agreed that the nursing staff would probably be delighted to have one less person in my room.

Jean went back to our home, packed her bags, and drove home to Delaware that afternoon. By leaving, she gave the first real outward expression to an emotion the whole family was starting to feel: powerlessness. There are few experiences more frustrating than seeing a loved one in a comatose state. You want to help, but you can't. You want the person to open his or her eyes, but they don't. Families of coma patients often resort to opening the patient's eyes themselves. It's a way of forcing the issue—of ordering the patient to wake up. Of course it doesn't work, and it can also further damage morale. Patients in deep coma lose the coordination of their eyes and pupils. Open the lids of a deep coma patient, and you're likely to find one eye pointing in one direction, the other in the opposite. It's an unnerving sight, and it added further to Holley's pain several times that week when she pried my eyelids open and saw, in essence, the askew eyeballs of a corpse.

With Jean gone, things really started to fray. Phyllis now began to exhibit a behavior I'd also seen countless times among patients' family members in my own practice. She started to become frustrated with my doctors.

"Why aren't they giving us more information?" she asked Betsy, outraged. "I swear, if Eben were here, *he* would tell us what's really going on."

The fact was that my doctors were doing absolutely everything they could do for me. Phyllis, of course, knew this. But the pain and frustration of the situation were simply wearing away at my loved ones.

On Tuesday, Holley had called Dr. Jay Loeffler, my former partner in developing the stereotactic radiosurgery program at the Brigham & Women's Hospital in Boston. Jay was then the chairman of radiation oncology at Massachusetts General Hospital, and Holley figured he'd be in as good a position as anyone to give her some answers.

As Holley described my situation, Jay assumed she must have been getting the details of my case wrong. What she was describing to him

was, he knew, essentially impossible. But once Holley finally had him convinced that I really was in a coma caused by a rare case of *E. coli* bacterial meningitis that no one could explain the origins of, he got started calling infectious disease experts around the country. No one he spoke to had heard of a case like mine. Going over the medical literature back to 1991, he couldn't find a single case of *E. coli* meningitis in an adult who hadn't recently been through a neurosurgical procedure.

From Tuesday on, Jay called at least once a day to get an update from Phyllis or Holley and give them feedback on what his investigations had revealed. Steve Tatter, another good friend and neurosurgeon, likewise provided daily calls offering advice and comfort. But day after day, the only revelation was that my situation was the first of its kind in medical history. Spontaneous *E. coli* bacterial meningitis is rare in adults. Less than 1 in 10 million of the world's population contracts it annually. And, like all varieties of gram-negative bacterial meningitis, it's highly aggressive. So aggressive that of the people it does attack, more than 90 percent of those who initially suffer from a rapid neurologic decline, as I did, die. And that was the mortality rate when I first entered the ER. That dismal 90 percent crept toward 100 percent as the week wore on and my body failed to respond to the antibiotics. The few who survive a case as severe as mine generally require round-the-clock care for the rest of their lives. Officially, my status was "N of 1," a term that refers to medical studies in which a single patient stands for the entire trial. There is simply no one else to whom the doctors could compare my case.

Beginning on Wednesday, Holley brought Bond in for a visit every afternoon after school. But by Friday she was starting to wonder if these visits were doing more harm than good. At times, early in the week, I would move. My body would thrash around wildly. A nurse would rub my head and give me more sedation, and eventually I'd become quiet again. This was confusing and painful for my ten-year-old son to watch. It was bad enough that he was looking at a body that no longer resembled his father, but also seeing that body make mechanical movements that he didn't recognize as mine was particularly challenging. Day by day, I became less the person he'd known, and more an unrecognizable body in

a bed: a cruel and alien twin of the father he once knew.

By the end of the week these occasional bursts of motor activity had all but ceased. I needed no more sedation, because movement—even the dead, automatic kind initiated by the most primitive reflex loops of my lower brainstem and spinal cord—had dwindled almost to nil.

More family members and friends were calling, asking if they should come. By Thursday, it had been decided that they shouldn't. There was already too much commotion in my ICU room. The nurses suggested strongly that my brain needed rest—the quieter, the better.

There was also a noticeable change in the tone of these phone calls. They too were shifting subtly from the hopeful to the hopeless. At times, looking around, Holley felt like she had lost me already.

On Thursday afternoon, Michael Sullivan got a knock on his door. It was his secretary at St. John's Episcopal Church.

“The hospital is on the line,” she said. “One of the nurses taking care of Eben needs to speak with you. She says it's urgent.”

Michael picked up the phone.

“Michael,” the nurse told him, “you need to come right away. Eben is dying.”

As a pastor, Michael had been in this situation before. Pastors see death and the wreckage it leaves behind almost as often as doctors do. Still, Michael was shocked to hear the actual word “dying” said in reference to me. He called his wife, Page, and asked her to pray: both for me, and for the strength on his part to rise to the occasion. Then he drove through the cold steady rain to the hospital, struggling to see through the tears filling his eyes.

When he got to my room the scene was much the same as it had been the last time he had visited. Phyllis was sitting by my side, taking her shift in the vigil of holding my hand that had been going on without a break since her arrival on Monday night. My chest rose and fell twelve times a minute with the ventilator, and the ICU nurse went quietly about her routine, orbiting among the machines that surrounded my bed and noting their readouts.

Another nurse came in, and Michael asked if she'd been the one who

called his assistant.

“No,” she replied. “I’ve been here all morning, and his condition has not changed much from last night. I don’t know who called you.”

By eleven, Holley, Mom, Phyllis, and Betsy were all in my room. Michael suggested a prayer. Everyone, including the two nurses, joined hands around the bed, and Michael made one more heartfelt plea for my return to health.

“Lord, bring Eben back to us. I know it’s in your power.”

Still, no one knew who had called Michael. But whoever it was, it’s a good thing they did. Because the prayers coming to me from the world below—the world I’d started out from—were finally starting to get through.

Nowhere to Hide

By Friday, my body had been on triple intravenous antibiotics for four full days but still wasn't responding. Family and friends had come from all over, and those who hadn't come had initiated prayer groups at their churches. My sister-in-law Peggy and Holley's close friend Sylvia arrived that afternoon. Holley greeted them with as cheerful a face as she could muster. Betsy and Phyllis continued to champion the *he's-going-to-be-fine* view: to remain positive at all costs. But each day it got harder to believe. Even Betsy herself began to wonder if her *no negativity in the room* order really meant something more like *no reality in the room*.

"Do you think Eben would do this for us, if the roles were reversed?" Phyllis asked Betsy that morning, after another largely sleepless night.

"What do you mean?" asked Betsy.

"I mean do you think he'd be spending every minute with us, camping out in the ICU?"

Betsy had the most beautiful, simple answer, delivered as a question: "Is there anywhere else in the world where you can imagine being?"

Both agreed that though I'd have been there in a second if needed, it was very, very hard to imagine me just sitting in one place for hours on end. "It never felt like a chore or something that had to be done—it was where we belonged," Phyllis told me later.

What was upsetting Sylvia the most were my hands and feet, which were beginning to curl up, like leaves on a plant without water. This is normal with victims of stroke and coma, as the dominant muscles in the extremities start to contract. But it's never easy for family and loved ones to see. Looking at me, Sylvia kept telling herself to stay with her original gut feeling. But even for her, it was getting very, very hard.

Holley had taken to blaming herself more and more (if only she had walked up the stairs sooner, if only this, if only that . . .) and everyone

worked especially hard to keep her away from the subject.

By now, everyone knew that even if I did make a recovery, *recovery* wasn't much of a word for what it would amount to. I'd need at least three months of intensive rehabilitation, would have chronic speech problems (if I had enough brain capacity to be able to speak at all), and I'd require chronic nursing care for the rest of my life. This was the best-case scenario, and as low and grim as that sounds, it was essentially in the realm of fantasy anyhow. The odds that I'd even be in that good of a shape were shrinking to nonexistent.

Bond had been kept from hearing the full details of my condition. But on Friday, at the hospital after school, he overheard one of my doctors outlining to Holley what she already knew.

It was time to face the facts. There was little room for hope.

That evening, when it was time for him to go home, Bond refused to leave my room. The regular drill was to allow only two people in my room at a time so that the doctors and nurses could work. Around six o'clock, Holley gently suggested that it was time to go home for the evening. But Bond wouldn't get up from his chair, just beneath his drawing of the battle between the white blood cell soldiers and the invading *E. coli* troops.

"He doesn't know I'm here anyway," Bond said, in a tone half bitter and half pleading. "Why can't I just stay?"

So for the rest of the evening everyone took turns coming in one at a time so Bond could stay where he was.

But the next morning—Saturday—Bond reversed his position. For the first time that week, when Holley stuck her head into his room to rouse him, he told her he didn't want to go to the hospital.

"Why not?" Holley asked.

"Because," Bond said, "I'm scared."

It was an admission that spoke for everyone.

Holley went back down to the kitchen for a few minutes. Then she tried again, asking him if he was sure he didn't want to go see his daddy.

There was a long pause as he stared at her.

"Okay," he agreed, finally.

Saturday passed with the ongoing vigil around my bed and the hopeful conversations between family and doctors. It all seemed like a half-hearted attempt to keep hope alive. Everyone's reserves were more empty than they'd been the day before.

On Saturday night, after taking our mother, Betty, back to her hotel room, Phyllis stopped by our house. It was pitch dark, with not a light in a window, and as she slogged through the soaking mud it was hard for her to keep to the flagstones. By now it had been raining for five days straight, ever since the afternoon of my entrance into the ICU. Relentless rain like this was very unusual for the highlands of Virginia, where in November it is usually crisp, clear, and sunny, like the previous Sunday, the last day before my attack. Now that day seemed so long ago, and it felt like the sky had *always* been spewing rain. When would it ever stop?

Phyllis unlocked the door and switched on the lights. Since the beginning of the week, people had been coming by and dropping off food, and though the food was still coming in, the half-hopeful/half-worried atmosphere of rallying for a temporary emergency had turned darker and more desperate. Our friends, like our family, knew that the time of any hope for me at all was nearing its end.

For a second, Phyllis thought of lighting a fire, but right on the heels of that thought came another, unwelcome one. *Why bother?* She suddenly felt more exhausted and depressed than she could ever remember feeling. She lay down on the couch in the wood-paneled study and fell into a deep sleep.

Half an hour later, Sylvia and Peggy returned, tiptoeing by the study when they saw Phyllis collapsed there. Sylvia went down to the basement and found that someone had left the freezer door open. Water was forming a puddle on the floor, and the food was starting to thaw, including several nice steaks.

When Sylvia reported the basement flood situation to Peggy, they decided to make the most of it. They made calls to the rest of the family and a few friends and got to work. Peggy went out and picked up some more side dishes, and they whipped up an impromptu feast. Soon Betsy, her daughter Kate, and her husband, Robbie, joined them, along with

Bond. There was a lot of nervous chatter, and a lot of dancing around the subject on everyone's mind: that I—the absent guest of honor—would most likely never return to this house again.

Holley had returned to the hospital to continue the endless vigil. She sat by my bed, holding my hand, and kept repeating the mantras suggested by Susan Reintjes, forcing herself to stay with the meaning of the words as she said them and to believe in her heart that they were true.

“Receive the prayers.

“You have healed others. Now is your time to be healed.

“You are loved by many.

“Your body knows what to do. It is not yet your time to die.”

The Rainbow

Thinking about it later, Phyllis said that the one thing she remembered above all else about that week was the rain. A cold, driving rain from low-hanging clouds that never let up and never let the sun peek through. But then, that Sunday morning as she pulled her car into the hospital parking lot, something strange happened. Phyllis had just read a text message from one of the prayer groups in Boston saying, “Expect a miracle.” As she pondered just how much of a miracle she should expect, she helped Mom step out of their car, and they both commented that the rain had stopped. To the east, the sun was shooting its rays through a chink in the cloud cover, lighting up the lovely ancient mountains to the west and the layer of cloud above as well, giving the gray clouds a golden tinge.

Then, looking toward the distant peaks, opposite to where the mid-November sun was starting its ascent, there it was.

A perfect rainbow.

Sylvia drove to the hospital with Holley and Bond for a prearranged meeting with my main doctor, Scott Wade. Dr. Wade was also a friend and a neighbor and had been wrestling with the worst decision that doctors dealing with life-threatening illnesses ever face. The longer I stayed in coma, the more likely it became that I would spend the rest of my life in a “persistent vegetative state.” Given the high likelihood that I might still succumb to the meningitis if they simply stopped the antibiotics, it might be more sensible to cease using them—rather than to continue treatment in the face of almost certain lifelong coma. Given that my meningitis had not responded at all well to treatment, they were running the risk that they might finally eradicate my meningitis, only to enable me to live for months or years as a once-vital, now-unresponsive body, with zero quality of life.

“Have a seat,” Dr. Wade told Sylvia and Holley in a tone that was kind but also unmistakably grim.

“Dr. Brennan and I have each had conference calls with experts at Duke, the University of Virginia, and Bowman Gray medical schools, and I have to tell you that everyone to a person is in agreement that things do not look good. If Eben doesn’t show some real improvement within the next twelve hours, we will probably recommend discussing termination of antibiotics. A week in coma with severe bacterial meningitis is already beyond the limits of any reasonable expectation of recovery. Given those prospects, it might be better to let nature take its course.”

“But, I saw his eyelids move yesterday,” Holley protested. “Really, they moved. Almost like he was trying to open them. I am sure of what I saw.”

“I don’t doubt you did,” said Dr. Wade. “His white blood cell count has come down as well. That’s all good news, and I don’t for a minute want to suggest that it isn’t. But you need to see the situation in context. We’ve lightened Eben’s sedation considerably, and by this point his neurologic examination should be showing more neurological activity than it is. His lower brain is partially functioning, but it’s his higher-level functions that we need, and they’re all still completely absent. A certain amount of improvement in apparent alertness occurs in most coma patients over time. Their bodies do things that can make it appear that they’re coming back. But they’re not. It’s simply the brainstem moving into a state called *coma vigile*, a kind of holding pattern that they can stay in for months, or years. That’s what the fluttering eyelids are, most likely. And I have to tell you again that seven days is an enormously long time to be in coma with bacterial meningitis.”

Dr. Wade was using a lot of words in an attempt to soften the blow of a piece of news that could have been spoken in a single sentence.

It was time to let my body die.

Final Night, First Morning

Before sitting down with Dr. Wade, Holley told Bond to wait outside the door because she hadn't wanted him to hear what she feared was very bad news. But sensing this, Bond had lingered outside the door and caught some of Dr. Wade's words. Enough of them to understand the real situation. To understand that his father was not, in fact, coming back. Ever.

Bond ran into the room and up to my bed. Sobbing, he kissed my forehead and rubbed my shoulders. Then he pulled up my eyelids and said, directly into my empty, unfocused eyes, "You're going to be okay, Daddy. You're going to be okay." He kept on repeating it, again and again, believing, in his child's way, that if he said it enough times, surely he would make it true.

Meanwhile, in a room down the hall, Holley stared into space, absorbing Dr. Wade's words as best she could.

Finally, she said, "I guess that means I should call Eben at college and have him come back."

Dr. Wade didn't deliberate on the question.

"Yes, I think that would be the right thing to do."

Holley walked over to the conference room's large picture window, which looked out on the storm-soaked but brightening Virginia mountains, took out her cell phone, and dialed Eben's number.

As she did so, Sylvia stood up from her chair.

"Holley, wait a minute," she said. "Let me just go in there one more time."

Sylvia went into the ICU room and stood by the bed next to Bond, as he sat silently rubbing my hand. Sylvia put her hand on my arm and stroked it gently. As it had been all week, my head was turned slightly to one side. For a week, everyone had been looking *at* my face, rather than

into it. The only time my eyes opened was when the doctors checked for pupil dilation in reaction to light (one of the simplest but most effective ways to check for brainstem function), or when Holley or Bond, against the doctors' repeated instructions, had insisted on doing so and encountered two eyes staring dead and unmoored, askew like those of a broken doll.

But now, as Sylvia and Bond stared into my slack face, resolutely refusing to accept what they had just heard from the doctor, something happened.

My eyes opened.

Sylvia shrieked. She would later tell me that the next biggest shock, almost as shocking as my eyes opening, was the way they immediately began to look around. Up, down, here, there . . . They reminded her not of an adult emerging from a seven-day coma, but of an infant—someone newly born to the world, looking around at it, taking it in for the first time.

In a way, she was right.

Sylvia recovered from her initial flat-out shock and realized that I was agitated by something. She ran out of the room to where Holley was still standing at the big picture window, talking to Eben IV.

“Holley . . . Holley!” Sylvia shouted. “He’s awake. Awake! Tell Eben his dad is coming back.”

Holley stared at Sylvia. “Eben,” she said into the phone, “I have to call you back. He’s . . . your father is coming back . . . to life.”

Holley walked, then ran into the ICU, with Dr. Wade right behind her. Sure enough, I was thrashing around on the bed. Not mechanically, but because I was conscious, and something was clearly bothering me. Dr. Wade immediately understood what it was: the breathing tube that was still in my throat. The tube I no longer needed, because my brain, along with the rest of my body, had just kicked back to life. He reached over, cut the securing tape, and carefully extracted it.

I choked a little, gasped down my first fully unaided lungful of air in seven days, and spoke the first words I’d spoken in a week as well:

“Thank you.”

Phyllis was still thinking about the rainbow she'd just seen when she exited the elevator. She was pushing Mom in a wheelchair. They walked into the room, and Phyllis almost fell over backward in disbelief. I was sitting up in my bed, meeting their gaze with my own. Betsy was jumping up and down. She hugged Phyllis. They were both in tears. Phyllis came closer and looked deep into my eyes.

I looked back at her, then around at everyone else.

As my loving family and caregivers gathered around my bed, still dumbstruck by the inexplicable transition, I had a peaceful, joyous smile.

“All is well,” I said, radiating that blissful message as much as speaking the words. I looked at each of them, deeply, acknowledging the divine miracle of our very existence.

“Don't worry . . . all is well,” I repeated, to assuage any doubt. Phyllis told me later that it was as if I were imparting a crucial message from the beyond, that the world is as it should be, that we have nothing to fear. She said she often recalls that moment when she is vexed by some earthly concern—to find comfort in knowing that we are never alone.

As I took stock of the entourage, I seemed to be returning to my earthly existence.

“What,” I asked those who were assembled, “are you doing here?”

To which Phyllis replied, “What are *you* doing here?”

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