

## Perspective MAY 23, 2013

## Under the Medical Tent at the Boston Marathon

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**B**right sunlight filtered through the awnings of the medical tent pitched in Copley Square, where I joined the many medical professionals caring for people who'd fallen ill from their 26.2-mile run.

Some volunteers had been staffing the medical tent for years one nurse had worked at the Boston Marathon more than 25 times.

Sickened and stressed runners poured into our makeshift hospital. A runner stumbled in and vomited into a bag. We helped him onto a cot, where he sat shivering. "You're OK," a nurse said gently, wiping his face. But his core temperature had dropped to 96 degrees, and he began having violent rigors. We brought him Mylar blankets and hot bouillon. Nearby, a woman with intense hamstring spasms fell onto a cot; a runner with liver disease trembled with asterixis, his eyes roving in wild saccades.

Suddenly, there was a loud, sickening blast. My ears were ringing, and then — a long pause. Everyone in the tent stopped and looked up. A dehydrated woman grabbed my wrist. "What was that?" she cried. "Don't leave." I didn't move. John Andersen, a medical coordinator, took the microphone. "Everybody stay with your patients," he said, "and stay calm." Then we smelled smoke — a dense stench of sulfur and heard a second explosion, farther off but no less frightening. Despite the patient's plea, I walked out the back of the tent and saw a crowd running from a cloud of smoke billowing around the finish line. "There are bombs," a woman whispered. My hands began to shake.

I stood outside and called my family. "There are bombs going off here," I said. Worried but calm, my mother said, "Just take care of yourself and get out of there."

I almost fled, thinking there might be more bombs nearby. There was an exit onto Dartmouth Street, where the crowds were swiftly moving away. But from within the tent I heard Andersen's voice, an echo of my own conscience: "All medical personnel stay with your patients." His straightforward, controlled instruction appealed to some deep conviction reinforced by my medical training. When I reentered the tent, the patient who'd grabbed my wrist was gone. My friend Jennifer Schwartz was looking for her stethoscope — "I can't find it," she said, distressed. A nurse standing between cots be-

N ENGL J MED 368;21 NEJM.ORG MAY 23, 2013

The New England Journal of Medicine

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Outside the Medical Tent at the Boston Marathon, April 15, 2013.

gan to cry. "Are you OK?" I asked. She reached for an IV bag for a patient. "I'm fine," she said, brushing away tears. "Don't worry."

Pierre Rouzier, a family physician who'd spent his whole career doing triage, told me that after the blasts he didn't know where he should go or what he should do — he had no idea how to triage himself. "That was the hardest part: Where would I be most valuable?"

One nurse told me she remembered EMTs running out to the site of the explosion the moment the bombs burst. "They were off before I could blink," she said. Many physicians followed. "After I saw a guy in a wheelchair coming into the tent with a head wound," Rouzier said, "I decided to go to the scene." He texted his wife what might be a good-bye message: There's a bomb at the finish line and we have to help. "I didn't want to die," he said, "but there were people out there."

At the first blast site, he saw bodies piled on top of each other in an area "maybe 20 feet by 40 feet." He couldn't distinguish victims from responders. People had curled up beside injured relatives. Caregivers — EMTs, physicians, bystanders - fell to their knees tending to the people on the ground, aware that at any moment another bomb could explode beside them. Rouzier didn't know how best to help. Triage had already begun; first aid was being administered. "I took off my belt and went to put it around someone's leg, but then I saw they already had a tourniquet." When he saw a woman with an open tibia and fibula fracture, he created a splint out of a poster and two slats of wood from a fence barrier. The woman held his arm and said, "I'm going to die right here, and no one is going to know who I am." Rouzier held her hand and told her, "You're not going to die."

Later, Rouzier told me he

couldn't remember how long he was there — that suddenly the scene had folded in on itself, that when the response vehicles had cleared the area, it was as though he had traveled through time and nothing had occurred there at all. Many described this surreal sense that events were occurring rapidly before their eyes and then receding to a remote vanishing point. Rouzier said he couldn't remember the wounded as real people; he believed his actions had been mechanical rather than compassionate. "I didn't look anyone in the eye," he said. Instead, he saw limbs, legs, and gaping wounds. "The last person I saw at the scene — I never got her name, and she never got mine."

At the tent, I stood in a crowd of doctors, awaiting victims, feeling choked by the smoke drifting along Boylston. Through the haze, the stretchers arrived; when I saw the first of the wounded, I was overwhelmed with nausea. An injured woman — I couldn't tell whether she was conscious — lay on the stretcher, her legs entirely blown off. Blood poured out of the arteries of her torso; I saw shredded arteries, veins, ragged tissue and muscle. Nothing had prepared me for the raw physicality of such unnatural violence. During residency I had seen misery, but until that moment I hadn't understood how deeply a human being could suffer; I'd always been shielded from the severe anguish that is all too common in many parts of the world.

"Clear the aisles!" Andersen called. More victims followed: someone whose legs had been charred black, another man with a foot full of metal shrapnel, a third with white bone shining through the thigh. I watched in

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shock as the victims were rushed down the center aisle to ambulances at the far end of the tent. Many of us barely laid our hands on anyone. We had no trauma surgeons or supplies of blood products; tourniquets had already been applied; CPR had already been performed. Though some patients required bandages, sutures, and dressings, many of us watched these passing victims in a kind of idle horror, with no idea how to help. When I asked Andersen what I could do, he glanced at me sadly, shook his head, and threw up his hands.

We returned to the cots and worked on patients with minor injuries from the blast, following instructions that came over the microphone. Hearing "Perform a secondary survey," we examined chests and backs for superficial wounds. Beside me, James Broadhurst, a family physician, rebandaged a woman with a calf injury. One older woman screamed at me, "Please, find my daughter! Did she survive?" Two sisters sat on a cot in tears; when I asked if I could help, they shook their heads. I drifted among the beds, ashamed that there was no other skill I could contribute. Nearly every physician I saw looked back at me with the same numb, futile expression. Eventually, the dehydrated and dazed patients who had filled the cots in the early afternoon were gone. My friend Jennifer was looking for one: "She might have been hyponatremic," she said, "but I don't know where she went."

Then medical personnel were the only ones left. SWAT vehicles gathered on Dartmouth and Boylston. The sirens were continuous. Police officers started to filter in through the entrance with dogs sniffing along the walls. There were no patients left to care for; the victims who'd been carried down the aisles were now in emergency bays or operating rooms in nearby hospitals.

Boylston Street was empty, the drifting smoke the only clue that something had happened there. Later, Broadhurst recalled traveling with a group of doctors down Boylston Street in search of the thousands of runners who had never reached the finish line and could have wandered off in need of medical attention. "We made our way down to Arlington into the Public Garden. Across the Common, we saw emergency vehicles, but there were no runners showing up. They were all gone. I have no idea where," he said.

When I left the medical tent, I heard a third explosion — which turned out to be a controlled detonation — that sent a new wave of fear through the thinning crowd. I joined the pedestrians, walking toward the South End in my scrubs. A few people asked me what had happened. I couldn't answer them. As I walked home, I drew a clear line in my memory. On one side were the events preceding the blasts, when I'd marveled at the functioning tent, with patients carefully triaged, hydrated, bandaged, and warmed. On the other side were the moments after the blasts, when many of us sank into a sensation of futility, seeing victims whose injuries and trauma surpassed our capacity to help.

Broadhurst told me later, "I'm a family medicine doctor. I don't know how to care for horrific trauma." Instead, he said, he sat beside patients with minor injuries who were dazed and in psychological shock and tried to offer some semblance of stability. He looked them in the eye and said, "I'm a doctor, and I'm going to take care of you, and I'm not going anywhere. Now you are safe."

Back at my apartment that evening, I wrote my thoughts down in a notebook but didn't feel any better. Days later, many professionals who were in the tent told me they still couldn't sleep, reliving the images of violence. I recollected with almost perfect acuity the sound of the explosions and the sight of that first woman who'd lost her legs. To counter such memories, I focused on the pre-marathon hours when I coasted down Boylston Street on my bicycle, sharing the road with skateboarders, joggers, and spectators who'd woken early to celebrate the beauty of the spring morning. I try to hold onto this sensation of freedom, hoping that it may, in some small way, displace the horror of the events that followed. I continue to believe that without such resilience, we would never have the courage to hold another marathon, or return to work, or care for our next patient.

Outside my window, I saw that people had grown restless and moved out into the streets. I closed my notebook for a bit and walked out of my apartment to join the rest of the city.

Disclosure forms provided by the author are available with the full text of this article at NEJM.org.

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This article was published on April 23, 2013, at NEJM.org.

DOI: 10.1056/NEJMp1305299 Copyright © 2013 Massachusetts Medical Society.

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