

# Be Still My Beating Heart

*A Conversation with  
a Heart Surgeon*

Written by Lindsey Lowe  
Photo by Chuck St. John

So many of us begin our mornings early, for we have jobs to do. We pour tumblers of coffee and ease onto the interstates. We arrive at our desks, five minutes late, and turn on our computers. We sit down, we make our to-do lists, and we begin to work.

Dr. Parvez Sultan, a cardiovascular surgeon at St. Vincent's Hospital, may begin his mornings with coffee, too. But instead of sitting down at his computer, many of his days start with a conversation with his surgical team as they prepare for the day's work. His office is sterile and his agenda filled with encounters with something most of us will never see: the human heart. And while I believe that I have the best job in the world, I must admit that Dr. Sultan's gig is pretty neat. It's a sentiment he agrees with; opening a patient's chest cavity, reaching in and handling the heart, and fixing it, he says, is still, after more than eight years of practice, exhilarating.



"When you open the chest, it's pretty amazing," he says. "We use a mechanical saw. We open the chest, and then the heart is in the pericardial sac, and we open that, and every day, every time I open it, it still amazes me. Everybody's size is different. The blood vessels can be different. It still amazes me, the way the heart is beating. And any time students or anyone who hasn't seen heart surgery comes to the OR, it amazes them how when you open the pericardial sac, the heart pops out. And it's beating."

Sultan says he was initially drawn to heart surgery because the heart, much like an algebra equation, often gives you the answer you want when you use the right formula. "The physiology [of the heart] is beautiful, and everything makes sense," he says. "If there's volume loss, you give volume. If there's blood loss, you give blood." Sultan says that despite its intimidating nature, cardiovascular surgery offers him something that a lot of doctors don't receive: the chance to see it work immediately. "I wanted to do something in my career where I can see the major effects of it," he explains. "If I fix something, it gets better. It's like a car-mechanic kind of thing. If you fix it, it starts functioning. Say there's a bad valve or an aorta that's being torn apart. I go and fix it." One of his favorite parts, he says, is the process of stopping the beating heart, putting it on the bypass machine (which keeps the blood oxygenated while Sultan and his team work on the heart itself), and then the moment after: "Once we're done, we bring the blood back from the bypass machine into the patient's own heart, and we start making it beat slowly, letting it slowly wake up," he says. "You put the rhythm back into the heart."

He points out that the field is constantly evolving as technology improves, and he is learning every day how to better care for the hearts of his patients. "How I did heart surgery during my training and how I do it now is quite different," he says. "You're constantly learning. Some of the surgeries that we are doing today at St. Vincent's are much more innovative, and they were not taught to us during our fellowship, so we learned them on the job. And you have to have a love for learning; every day, there is something new, and that's what I like. And of course, every patient is different. That is the beauty of cardiac surgery, I think: No two patients are

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alike. Even in the most routine cases, someone can throw you a curveball. You have to think very fast on your feet...time is ticking when you're on bypass."

I asked Sultan if he remembers his very first heart surgery, and he smiled. "Of course I do," he says. Sultan says it's a long road—years of medical school, residency, and a fellowship—and that he counts his first time as the day he first did cardiac surgery completely unsupervised. He'd been in the operating room for years by that point, but the whole thing still made his own heart race. "I had a coronary bypass, a bread-and-butter procedure," he says with a smile. "I made a checklist of all of the things I had to do. Even though I had done it hundreds of times, I wanted to be sure I did not miss anything. I was up early; I was excited. And everything went well, but it was quite dramatic. I still remember the case, of course. I had to make sure there was no bleeding, which is the bane of our existence. Bleeding means there's something wrong."

"In the first year, I always made my checklists. But it becomes second nature," he says. "I know all the steps now. You second-guess yourself, though. Even now, when it's a complex case, I review the details very, very carefully. After all, it's the heart."

Sultan says that many of the cases—he does two to three surgeries a day—he sees are the direct result of heart disease, the number-one killer in this country. In fact, one of the reasons he became a heart surgeon is because heart disease is prevalent in his own family, in India. "I thought jumping into solving this problem might be helpful," he says. And so he does—he fixes hearts. But he says that there are ways to reduce your risk of devel-

oping heart complications, things that we should take seriously, for without a healthy heart, a person cannot truly be healthy. The main things, of course, are a healthy diet and exercise. But he also urges people to educate themselves about the risks and symptoms and to go to the doctor sooner, rather than later, if they experience anything that could indicate heart disease. "We see young people dying of this," he says. "So if I was talking to a group of people, I would tell them that we have to make sure we're aware that heart disease is a problem. It can creep up without you knowing it; it can be silent."

"Keep yourself in tune to your body. We see a lot of people, men especially, who come in and say, 'Oh, I've had this gas pain for six months,' and it turns out he has 90 percent blockage. He's lucky he didn't die. And women, they are so busy being mothers and wives and being busy at work. They sometimes have less-defined symptoms, [because of estrogen] so a lot of times they ignore it. Instead of the classic chest pain and pain in the left arm, they may present with high blood pressure and sweating or jaw pain. So that's one thing: We have to be aware, especially if you have a family history. Because we can prevent this now. We can prevent heart disease."

And while he certainly hopes people do take measures to keep their hearts healthy and prevent disease, he still loves that when they come to him with sick hearts, he can make them better. "It is a great experience. One of the best experiences, to see how [the heart] works completely," he says. "The heart is stopped, and then the heart starts beating again." ●



Writer Lindsey Lowe speaks with Dr. Parvez Sultan about his experiences performing heart surgery.