Interview with Curt Tribble, Elite Surgeon

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Abstract

Dr. Curt Tribble is one of the world's leading cardio-thoracic surgeons and one of the most insightful performers I have ever had the pleasure to meet or interview. In this interview Dr. Tribble discusses his insights on excellence in surgery. He shares what he feels it takes to be a great surgeon, including having a vision of function and the ability to deal effectively with an element of uncertainty. He discusses the critical importance of focus, distraction control, optimism, teamwork, having fun and dealing with sub-optimal outcomes, all of which are relevant to the pursuit of excellence in virtually any mission or pursuit.

Terry: Could you to tell me a little bit about the setting you work in and how you overcome challenges in that environment.

Curt: There is certainly no mystery surrounding the job we have to do when we go into an operating room. The stakes are very high and expectations are high as well. We've gotten to the point these days in which heart surgery is quite safe, quite remarkably. But it is a big operation. Even for people who have a large amount of medical problems or who are relatively old, we expect to win. That is in contrast to a time when my predecessor, who was the chief surgeon when I came the University of Virginia. They were the pioneers in heart surgery. He was telling me that nineteen out of his first twenty patients in valve replacements died. They didn't expect to win. They expected to lose. We expect to win, we expect that our patient will survive. We expect things will go well. So the expectations are high and the stakes are high in that setting. The operations are extraordinarily complex and they last six hours. Twenty to twenty-five people will be involved on the team where there are machines that will ventilate the air in and out of the patient, and pump blood in and out, warming, filtering, oxygenating. All that has to be going on at the same time that we do our thing.

We always play music in the operating room. I have a list of music that is acceptable to everybody. The more unusual the case, the more I want the music to be familiar and enjoyable for everyone. I don't want the music to bother anyone. We have a CD player and play about five or six CD's. I lay them out and tell them how I want the CD's to be played. Once the operation is underway I have to set the cycle or the

rhythm of the operation, the intensity of the operation. Not all parts of the operation require maximum concentration, some things are very mundane. I know that not only is there that rhythm to the operation but that the team can't maintain a very intense focus completely during that entire time. They have to have an event flow as well, in order to be as sharp as they can when they have to be. Frequently as we prepare to get into the operation we will talk about a game or jokes that they heard, or about your favorite dog or something like that, but as we settle into a more intense time, then that idle chatter falls away and everyone knows we are going to focus more totally. Sometimes we cut off all the lights, so the only lights that are on are the ones that beam down on the heart. We wear headlights ourselves and magnifying glasses over our eyes so that we can see better, and everybody else in the room has this as their focal point. Everything is focused on that one area.

Terry: Could you talk a bit about how you try to set an optimistic atmosphere, and why you think it is important?

Curt: I know that everyone on my team will look to me as a role model. They will take their cues in how they are going to behave from me and I feel that responsibility. I know that I have to set the stage for what is optimal for my patients. I don't mean that I go in there and with false bravado. What I mean is that when we will go in I want to make it clear to everybody that I believe we are going to do that operation and that we believe that we have a very reasonable chance to get the operation done successfully, if we all pull together. I know they will not pay attention to everything that we need to get done, if they don't believe we have a chance. There are so many tiny details, just as an example each suture is sewed to a needle, every operation requires 200 different needles to finish and each stitch is sewed more than once. There is a lot of sewing, a lot of things to do, a lot of details. The suture is as fine as your hair, the vessels are no bigger than the inside of a ballpoint pen. If people are not paying attention, they are not taking proper care, and **they won't pay attention if they don't believe that we are doing it for a reason, that we have a chance, that we believe we can do it.** I've seen it so many times, someone will walk in and say, I don't know why we are doing this, this seems just like a drill, or maybe a warm autopsy. If someone says that, there is no use in even getting started on this case.

In some of our emergency operations, you come into a chaotic area. Last summer when I was getting ready to go bike riding with a friend, one of our residents called from his car phone. "Meet me at the hospital, there is someone at the hospital who has an aortic catastrophe". So I hopped in the car and sped over there and entered into a scene of utter mayhem. The lady was in the operating room and everybody was scrambling to get the heart-lung machine ready and the instruments out and the patient ready.

I knew that my first job was to get control of the situation. The first thing I did was to assess the groups in the room, the anaesthesiologists, the profusionists, the nurses and the residents and I put somebody in charge of each group. I told the chief anaesthesiologist, this is what I want done, this is what I want for the profusionist, this is what I want for the instruments, and for the residents. I want you to be prepping the patient. I wanted to get everybody in the mindset that I was going to be giving an order every 30 seconds or so on what we were going to do. I wanted them to focus on me on what we were going to do, so they'd pay attention and start working as a cohesive whole. We were able to get the room under control and gradually regain a focus and regain a team spirit. I've learned ways to achieve that. You walk in the room and you get your game face on. I want them to know that I'm serious, I'm here to focus. I'm ready, focused, intense, and optimistic about what to do and ready to respect everybody and their role on the team. Some of this has built up over time with routine operations to prepare for those chaotic days. Together our team is very stable and some of those people I have worked with for fifteen years. I know that whatever happens will be built on over time, days, months, years of tradition, shared memories or ethic, stories, or whatever.

Terry: What do great surgeons have?

Curt: I think that the thing that separates the good or great ones are those with a vision of what they want to accomplish. I used to think as a younger person, that there was some innate ability or dexterity with their hands but I don't believe that is true. Some people do have a God given talent for cutting to the right cell layer every time, but it is not necessary to have that. They are the rare Michael Jordan's of surgery, but more common are the Charles Barkley or the Magic Johnson or Larry Bird kind of people who really aren't the greatest athletes. Those three guys were not the three greatest basketball players in the USA but they were great players, and they were great team players. One of the things they have always had is a vision of what they wanted or a vision of what they wanted to create. They knew what everyone needed to be doing, they knew where everyone else was.

I finally realized that that is what the great surgeons had. They knew where they were headed, they knew what they wanted to create, they knew how it had to function at the end of whatever they needed to be doing. They don't really care how it looks, it is more a vision of function, how it has to work when they are done. They are driving towards that relentlessly. Anything that is not part of that vision can be dispensed with. It doesn't matter if the wound around the incision is bloody, or the rags are a little bit dishevelled. It doesn't matter if the stitches are a bit uneven, as long as they are doing the job. Every stitch can be different, every stitch has a different function, all going towards a vision of a functional result.

Another quality great surgeons have is the ability to deal with uncertainty. I see people who are paralysed by the element of uncertainty and in our work an analogy can be made to kayaking down a river. You're coming down the river and the rapids are coming. You leave one and you enter another. You really don't get the opportunity to determine how the rapids are dealt out, or how the problems in the operation are dealt out. You try to control and prepare for them and keep it as organized as possible. You keep the flow as good as it

can be, and the more used to the operation you are the more likely you are going to be able to do that. But inevitably you are going to have to be able to deal with different levels of uncertainty. You have to have a confidence about uncertainty. At certain times, I have to know that given everything I know, probably no one knows better than I, certainly no one is here other than I, and I will decide, and I will live with it.

I was faced with a very difficult time a week ago today. A lady I knew had been called in for a lung transplant and I got the call. We had everything set up and we were going to put the heart in one person and the lungs in two other people. They called me and told me that the donor had gotten a gun shot wound to the head and had a deterioration of the lungs, which sometimes does happen in head injuries. The lungs will get wet and their lungs will not oxygenate as well. As far as I know no one has ever used lungs like this before to transplant. We had this lady who had been flown in from far away to have a lung transplant and I knew she was waiting for a long time and I knew her and her husband. I knew she was dying, not that minute, but I knew that she would probably not last to another operation. I had a responsibility not just to her but to other people in our program because if we do too many crazy things and our patients don't live, our program could be closed down. There is a careful scrutiny of our results and my job is not necessarily to save everyone's life. The mortality rate on earth is one per person and no one gets out of here alive. I can't fight death. It is an exuberable thing. I can prevent suffering and that is my job.

I have to decide if what I am about to do will ameliorate a person's suffering. If what I am going to do is not going to make her live longer or live with less suffering then it is the wrong thing to do. For me there is an ethical uncertainty in terms of doing something that no one else has done. I was faced with that dilemma with this patient. I knew that the lungs had only deteriorated an hour prior to this period and that they couldn't be that bad, but they had dropped below our acceptable level criteria. I thought about this, and decided that I would put both of the lungs in one patient. She only needed one healthy lung but I thought she could get by on two compromised lungs.

The medical physician who was taking care of her came into the office and said, Kurt I heard that you are planning to go ahead and transplant. The lungs are no good. I said, they are marginal, they're marginal. He said, have you ever heard of anyone doing this before? I said, no. Have you ever done this before? I said, no. He said, what makes you think this is going to work? Given all that I know, I think this is the right thing to do for this patient, and I am going to do it, and I did. She is alive and doing fine today, she is off the ventilator and her lungs cleared up.

I have to be able to deal with clinical uncertainty. It would have been easier to walk away and say, the lungs are not good, the lady is going to die anyway. I felt I could live with the uncertainty that existed. That is a characteristic that great surgeons have had over the years, pushing ahead with an element of uncertainty, even when you may be criticized when the outcome might not be good, might not be optimal. I think that those two things, the vision and dealing with the element of uncertainty, are a big part of the make-up of a great surgeon.

Terry: What are your personal performance related goals?

Curt: I want to be the best surgeon I can be, everyday. My goal is to be the best surgeon I can be today and to

have fun doing it. My goal is to examine my life at any given time to see if I think I could do what I am doing right now in perpetuity. If I can't, I am doing the wrong thing. Most of the time I need to be in a groove or a niche, in a place or a zone, in a flow in my work where I would be happy with it from now and into eternity.

Terry: What is the best process for getting there?

Curt: The idea of process being so important was something that I stumbled on myself, and that I pass along to the residents. It is such a long program, four years of university, four years of medical school, seven to ten years of formal training in cardiac or heart surgery before you are even remotely ready to be independent. You are not even ready to be a master surgeon, you are just ready to be on you own. It is such a long process that if the process is not fun, if it is not stimulating or exhilarating, then you can't really do it. You shouldn't do it. You won't become your best unless the process itself is a fun thing to do. When we perform our best, especially in very difficult operations, we look forward to coming into the room together. We know we are going to be able to do that operation. We are excited, we are juiced. We get into a groove. It is a fun room to be in. That is the environment that we have to be in to do our best work. That's the environment that I demand for myself. If I don't have that, or it gets out of bounds from that, then somehow I am going to bring it back. The idea of the process being important is vital to optimal learning and optimal work.

Terry: What do you do to heighten awareness and focus?

Curt: We teach and get people to think about awareness. I think and talk about the fact that we can have multiple parallel levels of consciousness. I try to use all my senses when I am in the operating room, to hear, feel and see things that are occurring. The sound of the heart rate machine is almost below the level of audible sound but you can detect a problem with the machinery if you listen for it.

There are times when you have to exclude everything around you and focus. This takes me back to the days when I was swimming. The way we were taught to swim the breaststroke was to go through the water with a smooth and graceful flow. In one part of the stroke, where your face is straight down in the water, the water goes along your hairline and covers your face and your ears and you can't see or hear things outside the pool. All you focus on is what is beneath you. That time is very quiet, very serene and peaceful. But you must also come up for air at times, you must come up to wax and wane. For me the rhythmical, almost staccato rhythm of sewing a thirty or forty stitch circular anastomosis graph to an artery is like that. The cycle is repeated with each stitch. You come out, and you go back in, and **your focus brings you back to the point where every fiber of your being is focused on that stitch**. During those times, someone

could drop a stack of dishes and I am certain that I would not have any awareness of that as I focus back in on what I am doing. I am always learning and I am getting better and better at doing it. The analogy of the breaststroke is very helpful to me when I am blocking in and coming back out, blocking in and coming back out and developing that even flow of focus.

Terry: Can you tell me a little about how you have learned to deal with set-backs or sub-optimal outcomes?

Curt: In every academic surgery department we have a conference that deals with untoward outcomes, deaths and complications, called a morbidity conference. As I began my training in surgery we had a weekly morbidity conference and it was a very important focal point in my week.

That was a time to analyze and learn. The conference also served as a sort of catharsis, a confessional if you will, but I really didn't understand every facet, the layers of that for a while. Charles Bosk wrote a book called Forgive and Remember. He became fascinated by this one central focal point of surgical departments, this one weekly conference of analysis of bad outcomes. He wanted to learn how people dealt with the fact that they were going to fail often. This is one thing I ask my residency applicants. Having gone through your record, as far as I can tell you have never failed at anything. You've been a great student, a great athlete, you've accomplished all these things and you probably have not experienced failure, at least not in it's ultimate bitter, full boring way. Usually I am right. How are you going to deal with failure, because it is going to be a reality of your life? You are going to have things that are not going to work well. You are going to have things that you can't change and things that are not going to turn out the way you wanted. How are you going to deal with that reality? They usually don't have a plan.

My own thinking in that regard began in the early days reading this book. I realized that one had to be able to forgive oneself and others for things that didn't go well. I saw people who were able to forgive themselves very easily, they blamed others. I saw people who could forgive everybody else but themselves, and the guilt and feelings about what had happened would eat them alive. They couldn't really deal with it. You have to be able to do both, you have to forgive yourself and others. In order to attain that forgiveness you have to learn, and remember the lessons from the outcome.

You can never really get rid of those memories. I can remember so very many of my patients that haven't done well. I know their names, and I can see their faces and I know their families. Sometimes I honestly feel that they are in my house at night. I can get up and they are there, but I can live with that because if they are there, they know that I did my best. They know that not only did I give them my all, and did my best, but that I learned from them, and no matter what went wrong with their operation and no matter how bad it

was, I will do better in the future with other people. I think that is the only way that you can learn to live with yourself and forgive yourself, and forgive the others on your team. There is an implicit assumption that everyone tried and everyone did their best and that everyone will learn from that. That organized weekly conference helps to keep that ethic alive.

I did not really incorporate that process into a more intimate, or immediate micro level until I was sewing these little anastomoses, tiny junctions of grafts around the heart, twenty-five stitches, twenty five times in five minutes. Nothing was quite like sewing those things. Nothing that I had done previously required the time pressure, because the heart is without blood flow at this time. The heart is just dying as we work, and you get that sense of urgency when you work because I know if I sew that thing wrong the patient will die. The heart will never work again.

As you begin to sew that graph, the first part is easy. You go along, you feel a little rhythm, you're moving, you feel like you are getting in the flow of that anastomosis. As a learner I would come along and be feeling good about what I was doing. My supervisor would be standing at the side of the table watching me. I knew I had to develop a vision, an evolving vision of what was acceptable or what was our goal. The only way I would learn that was by watching and doing, and watching myself doing. I knew I had to learn as I went. I couldn't just say to him, you take the hardest stitches. I had to learn and I had to remember when I came around the anastomosis that the quality of the stitches had to improve. As the pressure of each stitch grew, the importance of each stitch was greater. A single untoward event at the toe of the anastomosis would have a death dealing effect, it would have dire consequences. We call those stitches, " widow maker" stitches, they can kill a patient.

As long as the stitches are going in the right places and you are getting good feedback from your mentor, your conscience, you're feeling good. Often I'd get down to a part and he'd say, that is not good enough, you missed that, you caught the back wall of the vessel, that would have closed off if we had left that stitch there. A flood of emotions flow into you, you're mad, you're mad at him (your supervisor), you want to argue, no I think it is OK. Yet you have to bend to his knowledge, his authority and listen to his idea, even if you disagree. You don't have time to argue. What you have to do is take the stitch out again and get it right and move on.

That stage seems pretty straightforward, but guess what, the next stitch is even more important. Yet I saw myself still back in the last stitch that he didn't like and I'm supposed to be ready for this more important stitch. I couldn't do it right under those conditions. We often say that under those conditions, perfection is the enemy of good. You have to know what you can accept. If you keep trying to get it just right, you'll destroy the vessel, you will tear it up.

You don't get too many chances to get that stitch just right.

I learned under those conditions that I that had to incorporate that important concept of forgive and remember into the microcosms of seconds. I had to do it, analyze it, or listen to an analysis at first, and learn from it. It was my goal to be able to analyze it, judge it, learn from it, remember that lesson, forgive myself if I didn't like the outcome, deal with that emotion, move on and keep trying to be better. I needed to do it, analyze, learn from it, forgive, and suppress but not completely. Just like on a computer screen you hit the minimize button to take it down to a small icon because the next screen has to be the next stitch. You have to be able to focus on that next stitch entirely without losing the lesson that you learned on this one. It has to be in there somewhere, so it can add to your combined experience, shared lessons, memory, knowledge, vision or image you are trying to create, the vision of what the perfect or acceptable anastomosis looks like.

I had to compress that down to a really tight system and I had to do it over and over and over. I had to go over those steps time and again in a staccato, rhythmical way. Once I learned that, I learned that I could apply it with everything I did. I loved playing basketball and I had never been as good as I wanted to be. When I learned that lesson I became a significantly better basketball player, a better shooter. In shooting baskets, inevitably you are going to miss some, and I used to mope around and feel bad about it. It bothered me and I didn't know how to deal with it. This is the way to deal with it. You do it, you look at the results, think about how it happened, good or bad. Were you too tired, did you take the shot with someone too close to you, should a teammate have taken it? Analyze, learn from it, forgive yourself for it, suppress it so it is in your memory, so that it is going to make you better. Then every shot makes you better. You are on a healthy plane. You are on a learning plane, constantly learning. You're not feeling bad about it, you are feeling good about it. No matter how bad the shot was, you can learn from it. What will I do different? How will I be better? How will this help me? This will make me better?

Sometimes a resident who wouldn't listen to me in the operating room, would listen on the basketball court. People are used to being coached on the court, the pressure is a little less, maybe the emotions are different, it was a teachable moment. It was a time when they were receptive to learning. I would say, that shot didn't turn out the way you wanted did it? "No." What did you learn from it? Analyze it so you know how you are going to get better. We would talk about that a little and I would say, you can take that lesson back to the operating room with you. Think about it. Do it, analyze it, learn from it, forgive yourself and the others as to what happened, suppress and move on. It will make you better. Personal quality control.

I have learned that this process is really a healthy life tool for me. I even use it in my relationships, for example with my wife. I might be grouchy and fuss at her. Then I say, OK I did something, it is done. I can't change it, but I would rather have said so and so, and I am going to do better the next time. It's going to be part of our shared tradition and whatever we do we are going to try to get better, whether it is how we talk to each other, or how we dance together, or perhaps a problem in the family. It is a very healthy tool in my life and one that I apply it to everything I do.