Host: Please welcome Dr. Robert Montgomery to Kidney Transplant Conversations. As chair of the Department of Surgery and director of the NYU Langone and Transplant Institute, he oversees a diverse team of medical and surgical specialists who provide a wide variety of surgery and transplantation services. And in 2010, he was credited in the Guinness Book of Records, with performing the most kidney transplants in one day as part of his pioneering work to set up domino paired donation, which is a way of getting around a donor and recipient having incompatible tissue or blood types.

So, Dr. Montgomery, you, yourself have firsthand experience of a transplant, although, not a kidney transplant, it was a heart transplant, but it means that there is a surgeon helping kidney transplant patients, you really know that journey very well.

Dr. Montgomery: Well, thanks Rolf. I first just want to say that I really appreciate speaking to you today and exploring some of these topics. So, yes, I did have a heart transplant in 2018. I have a genetic heart disorder, so, I've been aware of this and been dealing with it for over 30 years now. But it really did come to a head, and I had some life-threatening, near-death experiences prior to receiving my transplant. And so, I've been a patient really for probably as long as I've been a doctor. I found out about this when I was in my intern year at Johns Hopkins, but I have to say that, actually, becoming a transplant patient is a new thing. And it's been an amazing look into the experience of my patients. As you mentioned, I'm a transplant surgeon and run a transplant institute. So that's been an extremely valuable life's learning experience, and in fact, ironically, my three-year anniversary was yesterday.

Host: Oh, congratulations!

Dr. Montgomery: Well, thank you. Yes, it's very exciting, I feel a little bit like I'm living on borrowed time, so, each year, I think on my birthday, I celebrate getting older, which I think most people don't really look at it that way, but I certainly do.

Host: You know, I had a conversation with the transplant recipient a while back and I was complaining about the fact that it was my birthday and I felt like I was getting old, and she looked at me and she said, yes, but Rolf, what's the alternative? And I thought, obviously there's a different perspective when you've had a transplant and you're much more consciously aware of time passing.

Dr. Montgomery: It's a reset, there's no question.

Host: You've been a surgeon for a long time, you've been a transplant surgeon for a long time, and then you have a transplant, what are a couple of things that changed in terms of your understanding of what patients experience as a result of having the experience yourself?

Dr. Montgomery: Just living through the complexity of really, kind of dealing with doctor’s appointments, the tests, the blood draws, the medications, the organizing the medications, being sure that your nutrition is good, that you are exercising, I mean, those things seem so much more important now. There is this sense that you've been given a gift and you've got to take care of it, that is I would say, a much bigger set of responsibilities than I ever appreciated that my patients had to carry around with them every day, in addition to everything else they have to do. Life is complicated, this adds a whole different layer of complexity.

Host: And for you, as a physician, these things become somewhat routine, because you have practice, but for the patients, it's always for the first time.

Dr. Montgomery: It is, there is something about talking about the different medications, and tests, and everything, and then, actually, experiencing it yourself. I'm embarrassed to say that as I sat down in front of my 35 different medications, the first day or two after my transplant, I couldn't necessarily pick out which pill was my CellCept versus my calcium supplements. So, we don't walk in the shoes, we educate the patients about what's involved, but it's different when you actually have to do it.

Host: I can really imagine. So, I wanted to turn to our theme for today's discussion, and you've just really been talking about how complex the process is, but, preparing yourself for the fact that your post-transplant world, it's not going to go back to the same normal from before you had a kidney disease. In other words, the new normal is full of challenges that will always remain and it's important to mentally prepare for this.

Dr. Montgomery: The different organs come with a different set of challenges, I would say. My heart disease evolved pretty slowly over a long period of time, which is more of what you see with kidney disease, but not as typical for actually for heart disease. Oftentimes with liver disease, heart disease, lung disease, there may be a very accelerated course where people are feeling well and then suddenly, they're facing their mortality, and then, they're given a new organ, the time course can be very short. With kidney disease, it tends to be more prolonged, so patients will be aware in many cases, not all cases, but in many cases that their kidneys are gradually failing. Some people will be on dialysis for years before they actually receive their kidney transplant. And so, there's a certain amount of preparation that, you know, mentally of being ill. And then, from that standpoint, generally, when they receive their transplant, it feels like a big upgrade, but, and they don't necessarily think back, you know, many years to what it felt like to feel, quote/unquote, normal. They compare how they feel after the transplant, maybe to how they felt right before. And, I think the vast majority, just about everyone that I've ever taken care of, does see it as a tremendous upgrade, but it does come with its own set of challenges. I think we try to prepare the patients for that, but it's hard to hear that, I think when you're sick all you're thinking about is, I want to feel better than this. But the idea that you can snap a finger, put an organ in, and you have a normal life again, it may be something that many of us think is how it is, but it really isn't, you know, that can be a jolt to people, I think.

Host: What are some of the most challenging things that come to mind when you're thinking about that new normal?

Dr. Montgomery: I think there are a number of things. First of all, if you can imagine being on dialysis, so, three days a week, up to six hours with each session and some people get home dialysis every day. Just the amount of time is spent with this therapy, it's really an amazing thing to kind of wrap your brain around and it's hard to stay fit, it's hard to feel well, it's hard to keep your diet and exercise, having to restrict a lot of things in your diet when you're on dialysis. It's almost impossible to add muscle, it's very difficult to exercise, and to do many of the things that we would do if we weren't ill. And so, a lot of our patients are really compromised by the time they get their transplant, and they had this prolonged period of illness, and so, that is still there. Getting your strength back, undergoing physical rehab, that's one of the challenges that's sort of immediate. And if you don't start feeling better or if you are unable to get on that positive slope, I think then, everything seems difficult. Just the disability that occurs with chronic disease is, I think probably one of the biggest hurdles. And then, there are the medications, which are meant to prevent you from rejecting the organ, have the effect of disabling your immune system to some extent, and the risks that are involved, in terms of infections, susceptibility to certain types of cancers, that come along with that. In the current era that we're in, the concern about COVID and the effects of the worst prognosis, if one acquires COVID.

And then, there are the side effects of the drugs, can worsen hypertension, diabetes can bring on new onset diabetes, cardiovascular disease, and then, a lot of kind of quality-of-life effects that they can have, things like tremor, insomnia, problems concentrating, diarrhea, really significant change in bowel habits, things like that. These are all potential side effects, not everybody has, certainly, very few people have all those side effects, some people have one or two, but some people have more than that, but most people have something that either affects their lifestyle or certainly their risks in the post-transplant era.

Host: And as a surgeon yourself, any side effects of the various medications you're taking could be very challenging. So, I imagine, you have to be very careful about making sure you're taking your medications at the right times and maintaining a healthy lifestyle.

Dr. Montgomery: All that stuff is supremely important, I am super like, this is like religion for me. I feel as though, in a way, maybe in my own mind, be better at this than anybody else, set a good example for my patients. I've actually, in three years, now, knock on wood, I've never missed one of my medications, I exercise every day, I walk over 10,000 steps, and I'm pretty careful about my diet as well. So, these things, I think, become harder as time rolls on, but it's important to remain very disciplined, because I think it really does make a difference.

Host: And I did read that, quite a significant proportion of post-transplant patients don't actually manage to get back to their old jobs. What's going on there? What are the reasons for that?

Dr. Montgomery: Yeah, it's really, pretty, the statistics are staggering, actually, for patients who have CKD who receive a transplant, there's only about 20% of them that return to work, to full-time employment. And, if they come to the transplant on disability that falls to about 5%. I think there are a lot of different reasons for that. I've already discussed one, which is just the fact that the time course, usually of CKD, is prolonged and because the allocation system for kidney transplantation is primarily driven by waiting time. In other words, patients who receive the kidneys are those who have waited the longest. They've been on dialysis for all those years, for the most part, and once they get their transplant, they're already fairly debilitated.

And again, if they don't get early intervention, don't kind of turn that tide, I think, you know, with all the things they have to do in terms of their medications, their doctor's appointments, their tests, their, you know, missing work and that sort of thing. It's really hard for them to maintain a full-time job, first of all, and if they are already on disability, the idea of giving up their disability for an uncertain work life, again, that can be interrupted at any time by a rejection, or an infection, or a hospitalization, and I think it's particularly challenging for people who work by the clock. I think if you're dependent on your job, having to show up every day on time for work, and that's monitored and that sort of thing, it becomes really complicated to maintain a transplant effectively.

So, I think about all of those things, and some of them are built in, some of them are systemic built into our, cooked into our disability system. If you let go off your disability then it's really hard to get it back, and again, with all of these challenges that transplant patients can face after their transplant, it seems like too big a risk, to a lot of people.

Host: And then, right now, we have this extra dimension to consider, and that is the COVID-19 pandemic, having an impact both before and after transplant. I saw some data recently that chronic kidney disease is one of the highest risk factors for hospitalization with COVID. What's the likely cause of that?

Dr. Montgomery: So, I think everybody knows that there are certain, what we call comorbid conditions or different conditions that people have, including high blood pressure, cardiovascular disease, respiratory disease, diabetes, and chronic kidney disease that predispose one toward a worst prognosis when they become infected with COVID-19. I think one of the more important comorbid conditions is CKD. Why that is? I think it's still hotly debated, but we know that it correlates with a worst outcome. I work in New York and during the surge in March and April of 2020, in New York, everybody in the country was aware that we were just inundated with cases of this novel virus at the beginning of the pandemic in the US, and our transplant patients and our CKD patients did very poorly when they were hospitalized with COVID-19. In fact, early in that surge, transplant patients had a 25% mortality when they were symptomatic and in the hospital. So, it was a really scary time and particularly for those who were immunosuppressed, and that, unfortunately, hasn't gone away because of the problem that we faced with our response to the vaccine, in the setting of being immunocompromised. And, for the same reasons why we don't reject a foreign kidney, we have trouble mounting an immune response to COVID-19 or the vaccine. It's still very much with us in the transplant community, we haven't solved this problem yet, we have lots of people who are still isolating, and who have really been cut off when other people have started taking their masks off and sort of getting back into life. So, this is a big issue, it continues to be, almost two years later now.

Host: And we need to really have a plea for understanding, from people who may be vaccinated and may not realize that there are still people out there that are wearing masks because they're immunocompromised, or they have some medical reason why they need to do that. There was a horrible story about a family who were asked to leave a restaurant because they insisted on wearing a mask in the restaurant, and the policy was, no masks in the restaurant, and a little understanding wouldn't go amiss in that situation.

Dr. Montgomery: Yeah, a little understanding could go a long way in many aspects of our society right now. There are about 10 million people who are immunocompromised in the US and still really are trapped by COVID-19 and live, in fear, and, also, are aware that their mortality rate is higher than the general population and an order of magnitude higher. And, in that, I think it really warrants some understanding and some empathy with the situation that we face.

Host: So, if my math is correct, that's 1 in 30 people, that's probably around 1 in 30 people, a very significant number.

Dr. Montgomery: Yeah. And that's not all transplant patients, people can be immunocompromised for a lot of other reasons, they're getting cancer therapy, they've had a Crohn's disease, or some other autoimmune disease where they're receiving immunosuppression, but yeah, it's about 10 million people.

Host: I'd like to switch gears just a little and talk about something that I know you're very passionate about and committed to, and that is fostering a diverse and inclusive culture in your own workplace. In fact, you are the diversity equity and inclusion leader at NYU Langone.

Dr. Montgomery: Yeah, so there's a group of us that have been involved in a pilot project to really develop a strategy for DEI, in our institution. So, DEI, really in health care, has two, at least two facets to it. So one is, the environment and the workplace, the culture and the other are our patients. So, it's the healthcare providers and the patients, and it's important in both of those realms. And, so you have to think about that, it's a little more complex than the usual workplace that, maybe a corporate structure where, when you talk about DEI, you're really talking about the workforce. We also have to think about health equity and what we do with our patients, and are our patients getting equal care? Are they having equal outcomes? And so, it has that additional level of complexity. So, you want to just first look at the workforce and my feelings about what we need to do. Again, we have brought together a group of chairs of different departments, as well as different facets or aspects of our organization that are really entrusted and empowered to come up with our policies on DEI, and we have worked out how we want to think about DEI in the workplace. It's been really a fascinating, wonderfully fulfilling process, and I think we all feel that this is an important moment in time and what we really want to do is translate the ideas into policies, because policies have durability that continues beyond a moment in time. And, I think, the foundation under all of this is that there is a broad consensus and lots of data showing that a diverse workforce is a dynamic, innovative workforce that is better equipped to accomplish the mission and the goals of the organization. So, how do we create that? How do we create? How do we make people feel welcome? And that they're on an equal footing with everyone else. So, I think the first thing you really have to think about is the culture, so what kind of culture do you want to have? And we've embraced really, sort of a trifecta of important ideas that define our culture. And those are empathy, the idea that we should care about each other, this has been a really tough time in the history of humankind, to go through what we've all been going through, and the isolation, and people dying, people we know, family members. And it's really important to be a good colleague and a supportive colleague in the care of the people that you work with. Equity, everybody should be treated the same, and we should be very conscious of biases, unconscious biases of what the hazards are of the workplace in terms of a history of really not having true equity. And then, excellence, we are devoted to being the best that we possibly can be and the best in the world, at delivering healthcare to our patients. Those are the things, and I remind people in the organization about the main tenets of our culture, as often as they'll listen to me. But then, you really have to then think about beyond culture, what are your processes? How do you hire people? Are you incorporating DEI into a policy for hiring? What's the process? And that process should be written down, it should be something that is discoverable, not in somebody's mind, but something that people have agreed upon and then written down. How are you retaining people? How are you retaining underrepresented minorities in medicine, in your workforce to maintain all of the benefits of a diverse workplace. How are you promoting your faculty? Is everybody on a fair and even playing field? So, these are the critical, I think, aspects of the organization. And then, the other side of this is health equity, and you've got to have metrics, you have to know your data. So, we, for instance, I'll give you an example. We've looked at unrepresented communities in, whatever you can think about, let's say heart transplantation, right?

So, who are we transplanting? And how does that compare to other transplant centers? How does that compare to the numbers of people who actually have those diseases? Are we delivering heart transplantation in an equitable way? And then what are the outcomes? Are there disparities and outcomes? Are there disparities in terms of who gets put on the waiting list? When they get put on the waiting list? Is the disease much more advanced in certain communities? Underrepresented communities. And so, those kinds of things, we have dashboards, we're creating metrics, and we're looking at them on a very objective dashboard where we can really see where we are. If you don't know where you are, you can't know where you want to be.

Host: And you've got to let the data tell the story.

Dr. Montgomery: Right.

Host: The data tells you what's happening. It doesn't necessarily tell you why it's happening, so you've got to dig a little bit deeper for that.

Dr. Montgomery: You know there's a whole field of the social determinants of health, right? And so, you have to be aware of what that is about too. And so, one of the things we just integrated into, we have these traditional sessions, we call mortality and morbidity where we look at outcomes that weren't what we had expected, and why was that? And we've always thought about that from a medical standpoint, you know, what was missed? What could we have done differently? But we're now doing M and M, looking at the social determinants of health, So, was there some misunderstanding that had to do with language or a misunderstanding of that person's environment, their community, how the norms in the community, the way the family is structured, that we missed, that made a difference? A difference that we would not want to have happen. And so, all of these things really have to be thought about.

Host: So, you've got a very intentional culture built around, let me see if I can remember the three, so you've got empathy, and that really is the starting point for so many things, it makes me think of human centered design, empathy is the starting point for that as well.

Dr. Montgomery: Right.

Host: You've got equity and you've got excellence, and you've built that into a dashboard, so you have a data reflection of what's going on. Did you have to start from scratch with that? Or is there a growing body of knowledge that is shared among hospitals about how to go about creating that kind of intentional culture?

Dr. Montgomery: I would say that there were people who were really thinking about all of these things for many years. And, then there was the lightning bolt of George Floyd's murder, the impact that had in a very global sense, I think accelerated a lot of activities that were already happening, I mean, this isn't a completely new frontier, obviously. This has been something that people have been thinking about for a long time, but I think there does seem to be more of an urgency, and we just want to make sure that's not something that is a short-lived urgency. And again, I think that really speaks to being deliberate and being thoughtful about implementation and creation of policies.

Host: And you mentioned about creating a culture where you're hiring diversity, and that's great for patients, patients do well when they're communicating with someone who looks like them. But my understanding is that you do have a problem with higher burnout rates in some groups. What's going on there?

Dr. Montgomery: Retention, particularly of underrepresented minorities in medicine, is challenging. I think we have a pretty, diverse group of medical students. We have maybe a drop off in diversity when it goes to the level of residents and trainees, and then, the pipeline sort of narrows even further in academics, in particular, after training and at the faculty level, and then at the retention level. And I think one has to think about both ends of the pipeline. And, you have to have examples, I think, in the organization of really talented underrepresented people who are in leadership positions. Because if you can't see it, you can't be it, and if you don't have those examples, I think that people will, and they don't feel completely a part of the community, they feel that there are barriers to them being that feeling of inclusiveness. You're going to lose those people in the process, there are other options in medicine, you can go into private practice, you can go into different types of workforces as a physician and I think we lose a lot of talented people in academic medicine, because we can't really retain them and have them feel that positive sense that they're going to advance in the organization, and they're going to do the kind of things that we all want to do with our careers. So, I think the way we hire people is really important, but also, that they're given opportunities to advance into and end up in leadership positions and that then strengthens the whole system. I think an equitable workplace has the effect of producing less burnout and to dispiritedness about what the options are for that person.

Host: Well, look, we're nearly out of time and you've shed information from a patient perspective, from a physician perspective, and also as a leader for equity. So, thank you so much for all that you've shared with us today.

Dr. Montgomery: Oh, thank you.

Host: One last question is, it does seem like we're on the road to really, positive change and impacting some of these disparities. Are you confident that we're on the road to sustainable change?

Dr. Montgomery: That is dependent on each one of us, and again, we don't miss the moment and that it's not just a moment. I think when a lot of my family members, and extended family, after George Floyd's murder were really distraught, dispirited. My message was always, well, okay, it seems like there's not much hope here, but each one of us can start locally, we can do what each one of us can do, day to day to make a difference. And then, if we're all doing that, that message will amplify, and resonate, and be durable. If we feel completely overwhelmed by the situation, which I think many people did, during the past year, Martin Luther King said something about our society, it's a 10-day cycle and people forget, things move on. Now, our current news cycles are even less, that was said many years ago. And so, it's just I think it's a commitment to incorporating this into your life, and to live it, and if each one of us does that, the total will be greater than the sum of the parts, so I'm optimistic.

Host: That's a great place to end. I think you mentioned George Floyd, and one of my strongest memories of that whole situation was his daughter, saying, “My daddy changed the world.” So, we have some responsibilities to follow through on that.

Dr. Montgomery: That's right.

Host: Dr. Montgomery, thank you so much. We look forward to you coming back to the podcast at some point in the future.

Dr. Montgomery: Great! I'd love to, thanks again.

(End of recording)