

FROM RUSSIA

WITH LOVE & SKILL

BY MARY ANN LITTELL

FEW INJURIES ARE MORE HORRIFIC than the amputation of a limb. But the unthinkable sometimes happens, the tragic result of industrial accidents, mishaps with power tools, automobile collisions and other calamities.

For an adult to have to deal with such a catastrophe is difficult enough. But when it happens to a child, it is beyond unthinkable. In April, 12 year old Konnor Episcopo of Summit, NJ, was finishing a woodworking project with his father when his left forearm was severed by a saw a few inches above the wrist. His father describes it as a “freak accident.”

Konnor was rushed to Overlook Hospital in Summit, where the resident on call took one look and called the Emergency Department at UMDNJ–University Hospital (UH). It was clearly an injury that required the services of a specialized trauma center. The Overlook resident conferred with a resident at UH, who then called Ramazi Datiashvili, MD, director of Microsurgery and Replantation at UH. The surgeon, who specializes in reattachment of amputated limbs and digits, was in his office at the Doctors Office Center, located right next to the hospital.

The resident asked Datiashvili what to do about the patient. “Send him here,” the surgeon replied. Thus far, it had been a routine day, but not any more.

Datiashvili met Konnor and his distraught parents in the UH Emergency Department. The boy's limp, pallid hand was still attached to the forearm by a tiny piece of skin. "It was a terrible injury. Much of the tissue was crushed, and there was a lot of damage to blood vessels, nerves, and tendons," Datiashvili says. "It would be a tremendous challenge, but I thought we could reattach it. I said to the family, 'Be optimistic. There is hope.'"

He should know. The surgeon, an émigré from Russia, is an expert in his field. "Dr. D," as he is known to his office staff as well as the interns and residents he teaches, has performed hundreds of replantation procedures over the course of his career. While finger and toe amputations are a common injury, forearm amputations are rare. In fact, this was the first one Datiashvili had seen since coming to UH five years ago.

Konnor's injury was serious, but Datiashvili had treated other, even more devastating injuries. Many years ago in Russia, as a young surgeon, he performed a groundbreaking procedure that made him famous. The patient was also a child. The drama of this reconstructive surgery gripped all of Russia. It put him on television and on magazine covers, which hang on his office walls.

The Ultimate Challenge

Turn the clock back to 1976. Ramazi Datiashvili was 25 years old, a young physician in Russia. After finishing medical school he was recruited to be part of an elite medical team: the first microsurgical department in the Soviet Union. The group, based in Moscow, would provide the entire country with highly specialized medical services: replantation of amputated extremities and other reconstructive procedures.

"It was a tremendous honor to be selected for this training," he says. "Patients came to us from all over Russia, from as far away as Siberia. The work was extremely challenging and required a great deal of creativity."

After his training was completed, he remained in Moscow at a city hospital. By age 28, he was chief of its Microsurgery Department. In 1981, he accepted a new position—Junior Scientific Worker at the National Research Center of Surgery, a renowned academic medical center in Moscow.

In 1983, Datiashvili faced the surgical challenge of a lifetime. A baby girl from Lithuania was run over by a tractor, and both her legs were amputated below the knees. The child, named Rassa ("Last name too long! Too complicated!" Datiashvili says with a wave of his hand), was transported to a local hospital, but the injury needed more expert care than they were able to provide. So she was transported by military aircraft to Moscow.

Rassa's plight was seen as a lost cause. "None of the doctors

wanted to do this surgery," recalls Datiashvili. "Even my bosses, all highly skilled, refused. I was the only one. How could I say no? It's what I had been trained for." Such a procedure—bilateral reattachment of the lower extremities in a baby—had never been performed before.

Because Rassa was a child, the surgeon could not operate on her in his own facility. He had to move her to a central children's hospital. Initially, the hospital refused to take the case. It took several pleading phone calls and hours of negotiating to convince them.

The child was prepared for surgery and anesthetized when Datiashvili realized he had another crisis on his hands. The microscope he needed was locked away and no one had the key. He refused to start without the microscope, and a key was finally located.

"I was exhausted and very fearful," he continues. "Time is of the essence in these cases, and here we were, with constant delays. But finally, I did the operation, and it was successful."

Datiashvili is cited in the medical literature as the first to perform this procedure. It catapulted him into celebrity. A prominent Russian magazine named him Man of the Year, and he was the subject of three documentaries. He was asked to speak at universities around the world, and in 1988, was part of a five-person delegation of Soviet microsurgeons who traveled to the U.S. as honorary guest lecturers.

But he found fame to be a huge psychological burden. "I was young and a junior surgeon," he recalls. "All this attention felt unnatural and led to a lot of jealousy. Every eye was on me. I had to prove it was not an accidental success. I just continued to work hard and kept my dignity. In that way I earned the respect of my colleagues."

In 1991, he was promoted to the highest academic rank: Chief Scientific Worker. He had also earned several academic degrees, including the Candidate of Medical Sciences (similar to an American PhD) and the Doctor of Medical Sciences (comparable to a full professorship). He wrote textbooks and had more than 70 articles published, including nine in American journals. By age 41, he had attained the professional success that many only dream about.

Despite his success, life in Russia was difficult. For years, Datiashvili and his wife had contemplated leaving Russia for the United States. When asked why, he says simply, "Fish swim to where the water is deeper. Human beings go where life is better."

Elaborating, he says, "We had an interesting, full life in Russia. It was very rich intellectually and culturally, but not comfortable materially. Also, we wanted freedom. So we decided to go some-



THE FOREARM OF 12-YEAR-OLD KONNOR EPISCOPO was severed with a chain saw in April. He was brought to UMDNJ–University Hospital for replantation surgery.

KONNOR EPISCOPO, POST SURGERY. The procedure involved reattaching 18 tendons, four blood vessels, three nerves and the two bones of the forearm.



Skin grafting of a wound after excision of a large lesion.

Following the surgery, Konnor Episcopo was able to move his fingers, and a few days later, was even able to give his physician a modified “high five.” “It was so gratifying to be able to help this child,” Datiashvili says. “When I saw his hand turn pink, I was very happy.”

where else, where we would find freedom and a more open society.”

Two of the surgeon’s brothers had emigrated to the United States in the 1980s, both settling in Staten Island, NY. For years they had encouraged their brother to join them. In 1992, Datiashvili, his wife, their 3-year-old daughter and his elderly parents decided they were finally ready to go. Datiashvili’s colleagues were stunned when he told them of his decision to leave, but his mind was made up.

Climbing The Hill

They settled in Staten Island, near their family, and Datiashvili began the long, arduous task of earning an American medical license. He spoke no English. He took classes, read the dictionary voraciously, learned vocabulary from TV shows, and tried to adjust to a new environment. “It was very difficult,” he says. “I came here at age 42, at the top of my career, and had to start all over. It was like I had climbed a hill, and then fell down and had to climb it again.”

It took a few years to learn English and pass all the tests he needed for medical licensure—including courses like microbiology and biochemistry, which he had not studied for years. His knowledge of these subjects was understandably rusty. He had to re-learn the material, and in a new language, too. “If I had known how hard it would be, I’m not sure I would have come here,” he admits. But his expertise did not go unrecognized. Despite his lack of a U.S. medical license, he was invited to be a visiting professor at New York University Medical Center, Harvard Medical School, and Mt. Sinai School of Medicine.

In 1996, Datiashvili began a three-year residency in general surgery at Mt. Sinai School of Medicine. While some might question the wisdom of having such a highly skilled surgeon go through all this training, “rules are rules,” he says.

As a second-year resident, he received a phone call one day from a surgical resident at a hospital in Queens, NY. A 7-year-old girl with an almost complete amputation of the arm had been brought in, and the attending surgeons were struggling with the replantation procedure. Could he help? He had just finished being on call, but he drove to Queens to complete the surgery.

Following his general surgery residency, Datiashvili did a two-year residency in plastic surgery at New Jersey Medical School—and found his new professional home. “I immediately felt that

I belonged here,” he says. After his residency, he stayed at NJMS, joining the faculty as an assistant professor of surgery.

“I could have gone into private practice, but it was my choice to be at an academic

medical center,” he says. “This is a great place to be, and my work here is very interesting. There is teaching, attending conferences, the trauma work, being at the clinic. No day is the same.”

Life is good for Datiashvili and his family. They have remained in Staten Island, where there is a substantial Russian community. His daughter, now 20, is a student at the John Jay School of Criminal Justice in New York City. The family had an opportunity to take their first trip to Europe last year. “It was wonderful, and we enjoyed it,” he says. “But for us, there is no better place in the world than the U.S. We love this country.”

Being part of a busy trauma center offers many opportunities to treat challenging cases, like that of Konnor Episcopo. The child’s arm was reattached in a grueling, 12-hour procedure. It involved reattaching 18 tendons, four blood vessels, and three nerves; the two bones of the forearm were aligned and secured with pins. Datiashvili was assisted by residents Roshini Gopinathan and Matthew Trovato, as well as other members of the surgical team.

Following the surgery, the boy was able to move his fingers, and a few days later, was even able to give his physician a modified “high five.” After extensive rehabilitation, it’s anticipated that he should have good mobility—enough to enjoy trout fishing and fixing things, his favorite activities.

“It was so gratifying to be able to help this child,” he says. “When I saw his hand turn pink, I was very happy.”

And what of his other patient, Rassa? Datiashvili says she made a complete recovery. Today, she is a young woman in her 20s. “I’ve heard she wears stiletto heels and participated in a dance marathon,” Datiashvili says, laughing. “What a great testament to my surgical skills! Of course, I don’t know if it is true.”

He kept in touch with her for years, but the connection was lost when he moved to the United States. “I would really like to know how she is doing,” he adds. “I tried to reach her through the Lithuanian embassy, but they were unable to help me.”

“I had a dream,” he continues. “Oprah invited me to be on her show. We talk, and then she says she has a surprise for me. She points over to a door. Someone comes on stage, and I see that it is Rassa. So we are reunited. Maybe it will happen someday.” ●