

Connecting with Orthopedic Oncology Patients to Save Lives and Limbs

Samuel Kenan, MD, was always interested in fixing things, so it was no surprise that by his last year of medical school, he decided to take a residency in orthopedics. But the chairman of the department at Hadassah University Medical Center, Mayer Makin, MD, had other things in mind for the young man. Dr. Makin recommended that he train in orthopedic oncology and spend a year working in bone pathology to understand everything he could about bone cancer.

That was back in 1977, when fixing bone tumors meant amputation. But the chairman had hopes that Dr. Kenan would move the field into new directions that included limb-sparing, lifesaving surgeries. His mentor was right.

CREATING JOINT PROSTHETICS

Dr. Kenan finished his yearlong stint at Hadassah's pathology laboratory and completed six years of residency in orthopedic surgery at the Israeli health system before coming to New York for a fellowship with Michael Lewis, MD, at the Hospital for Joint Diseases. Dr. Lewis was doing precisely what the Hadassah chairman of orthopedics had envisioned: He was creating joint prosthetics made of metal and bone, and enabling pediatric cancer patients to walk out of surgery with their legs intact.

The bone prosthetics were a major advance, but the pediatric population brought new problems. Children's bones grow, so they had to figure out how to get both legs to match. They developed bone prosthetics that could be expanded as their patients grew. It changed the field, and Dr. Kenan became a fixer with a mission. "It's hard enough that children have bone cancer, but then to tell them that they might lose a leg was just too much," Dr. Kenan said.

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Dr. Kenan began working on sparing the growth plate, even when tumors were precariously close to the plate. Saving the growth plate meant that the limb would grow naturally to match the other leg.

He has been following some of his patients for more than two decades.

Dr. Kenan went on to head several orthopedic oncology programs, from the Hospital for Joint Diseases to Mount Sinai Medical Center and Hadassah. He was recently recruited by the North Shore-LIJ Health System to head an initiative in orthopedic oncology that offers young patients access to a team of health professionals, starting from the initial suspicion that there may be something wrong to chemotherapy surgery and lifelong care.

CONNECTING WITH PATIENTS

In addition to his technical skill in the surgical suite cutting out diseased bone, crafting an implant and setting the stage for healing, Dr. Kenan connects with his young patients in indelible ways. When 18-year-old Mariela Calderon of Port Washington showed up last October with osteosarcoma, Dr. Kenan called Nicole Lubin of Hempstead, a teenager who recently underwent surgery for bone cancer, and brought the girls together. Nicole came to visit Mariela at Cohen Children's Medical Center (CCMC) of New York. Watching Nicole walk effortlessly

gave Mariela hope that someday soon her crutches would be a thing of the past. And her leg, like Mariela's, would be spared.

"Dr. Kenan is technically exceptional, and it is the whole package of what he brings to the surgical table," said Jeffrey Lipton, MD, PhD, chief of pediatric hematology/oncology and stem cell transplantation at CCMC. "These patients are complex and we have teams of professionals working with patients."

Dr. Kenan has performed nearly 250 of these surgical cases during his career. He keeps in touch with many of the children, some of whom are now grown. He saves videos and photos of his young patients during all stages of the process. He pulls up a digital picture of John Browndorf, who is now 28 and taller than his doctor. Mr. Browndorf was 6 years old when he was diagnosed with Ewing's sarcoma, located in the proximal tibia. The first thought was that there would be no way to spare the growth plate; the tumor was too close. But his father, a golfer, wanted his son to walk — with both feet planted on the green — in his footsteps.

"Do what you can to save the growth plate," his father said. Dr. Kenan listened, carrying off the complicated surgery. Now, more than two decades later, Mr. Browndorf stands tall. And plays golf.

Mariela said that she wants to be a medical assistant when she grows up. And she looks forward to the day when she can replace her crutches with a fancy pair of high heels. ■

Online Extra Hear about Mariela and Nicole's experience with joint prosthetics. Go to <http://bit.ly/Lqg4nk> or use your smartphone to scan the QR code.



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To find out more about the orthopedic services offered by Dr. Kenan, call **516-280-3733**.



Samuel Kenan, MD, removed cancerous bone and replaced it with a limb-sparing device that will enable Mariela Calderon, left, to walk normally without fear of losing a leg to cancer. Dr. Kenan introduced Mariela to Nicole Lubin, right, who underwent surgery for bone cancer a few years ago.