City of Hope sarcoma surgeon tackles toughest tumors

By Abe Rosenberg

William Tseng, M.D., participated in City of Hope's Eugene and Ruth Roberts Summer Student Academy while he was a student at Arcadia High School. Now he's a surgeon specializing in rare liposarcomas.

William Tseng, M.D., is not one to quit when he hears the word "impossible" or, in surgical terms, "unresectable."

He's one of a handful of cancer surgeons expert at removing outsized tumors known as retroperitoneal liposarcomas. They are a rarity within a rarity.

Fewer than 17,000 people in the U.S. are diagnosed each year with sarcoma — a unique form of cancer that grows in bone or soft tissue. Liposarcoma, which develops in fatty tissue, accounts for about 2,000 of that total. The retroperitoneal variety turns up in the back of the abdomen — and in the headlines.

In extreme cases, a retroperitoneal tumor can grow to 50, 60 even 70 pounds ("It Wasn't a Beer Belly — It Was a Tumour the Size of a Baby Rhino!" read one headline in The Irish Times. They can be as heartbreaking as they are enormous. That's because retroperitoneal liposarcomas often wrap around major blood vessels and vital organs. To remove the cancer it may also be necessary, for example, to extract a kidney or part of the colon.

"It's very technical surgery," said Tseng, who joined City of Hope this summer, seeing patients at both the main campus in Duarte as well as at the South Pasadena and Arcadia clinical practice sites. "It's difficult to get it all out, and we have to decide what is the best operation for each individual patient."

But don't tell him it can't be done.

"My tumor was attached to my aorta," recalled patient Carole Weinberg. "He saved my life!" She remains cancer free four years after surgery. She calls Tseng "pretty amazing," praising how he laid out the facts, admitted they were "frightening" but also, through his unrushed, low-key, matter-of-fact demeanor, calmed her fears and instilled confidence.

Educating Patients

"I talk more than most surgeons," Tseng explained. "Because giving too little information [about liposarcoma] is not the right approach. There's too much confusion out there, too much misinformation.

"I want to give patients hope," he added. "Even if other surgeons say the tumor is unresectable, I'll tell the patient that as long as it is safe, I'm willing to try. That's my training. That's what was instilled in me."

He counts among his mentors — for skills as well as approach — Raphael Pollock, M.D., a world-class soft tissue sarcoma expert and director of The Ohio State University Comprehensive Cancer Center. They met during Tseng's fellowship at MD Anderson Cancer Center in Houston. Pollock calls Tseng "spectacular. One of the leading-edge sarcoma experts with a growing international reputation. He's really making his mark."

Some of that international reputation comes by way of Italy and another mentor, Alessandro Gronchi, M.D., a top sarcoma specialist who heads the National Cancer Institute in Milan. Tseng has traveled there many times to work with Gronchi. who describes his younger colleague as "very straightforward and thoughtful. He does the job." Plus," he adds, "he loves his patients."

Weinberg will vouch for that, pointing out that Tseng is always available and invests in long-term relationships with patients. "After surgery," she continued, "he said we're going to be good friends, that he'll see me at every follow-up scan."

Joining City of Hope is a bit of a homecoming for Tseng, who was raised just a few miles away in Arcadia, California. While attending Arcadia High School, Tseng twice enrolled in City of Hope's Eugene and Ruth Roberts Summer Student Academy, working in a lab but also exhibiting an early interest in his current work. "I reached out to the head of surgery and asked to shadow him," he recalled. Very quickly, Tseng "saw how surgery could make a deep impact on a person's life."

It was the intellectual challenge of liposarcoma, and the dire need to find better treatments, that drew Tseng to the obscure disease. "The science of it fascinated me," he said. "Here's a cancer that can show up anywhere in the body. It's never routine. There are so many nuances. It can start out as low grade and then the tumor or a part of it can abruptly become high grade and much more aggressive, and we don't understand why."

There are theories for that abrupt transition, including one put forth by Tseng in his own research. He suspects the body's immune system may play a role by creating so-called tertiary lymphoid structures, which normally inhibit tumor growth, but in some cases have been shown to make conditions worse.

A Challenging Field

Surgery remains the gold standard for treating most liposarcomas. Tseng laments that, at least so far, no ideal drug therapy exists. "The best chemo drugs we have right now will work in 20 to 30% of cases, possibly shrinking the tumor and delaying, but not eliminating, the need for surgery. And those drugs may not work at all on low-grade tumors," he said.

Nevertheless, many clinical trials are underway (more than 20 sarcoma trials at City of Hope alone), including tests of targeted therapies and immunotherapy treatments. A breakthrough can't come soon enough for liposarcoma patients, who typically must endure complicated surgery, the loss of organs, the risk of serious complications and the maddening fact of life that many sarcomas inevitably return, requiring still more surgery.

Because the disease is so rare, funding for research is hard to come by, and colleagues with deep sarcoma expertise are relatively few and scattered. That's a big reason Tseng came to City of Hope, where he is delighted to now be part of an institution focused on cancer, with a growing sarcoma department. "I think it will make a big difference," he said.

Watching from his vantage point in Milan, Gronchi agrees.

"You can't do sarcoma alone," he said. "At City of Hope, he'll have the opportunity to work with people invested in the disease. I'm happy he made the change. I would have hired him here!"

At home, Tseng enjoys family outings with his wife and 5-year-old son and indulging in favorite pastimes, especially travel, movies and modern art.

On the job, he is uniquely focused and driven, something those mentors noticed long ago. "He's ambitious to make a difference," Pollock said.

Still settling in, Tseng sends out a message to his current and future patients at City of Hope:

"It's important to maintain hope as you go through this journey," he said. "This cancer can be very overwhelming, but we're here for you. We'll take good care of you."

** This content appears courtesy of City of Hope. www.CityofHope.org **