



## INFIELD: A Big Departure from Standard Head and Neck Radiation

By Ryan Daugherty

A few years ago, Clyde Ledgerwood and his wife, Donna, moved to a community in Oklahoma with one goal in mind – to demonstrate a different and better method of agriculture to produce high-quality food through the use of aquaponics.

Four years earlier, Mr. Ledgerwood had retired as operations manager of air traffic at DFW airport. Shortly after, he and his wife moved to Europe where he taught air traffic control. It was after this four-year stint in Europe that they decided to move back to the United States to a farm in Oklahoma.

Before undergoing construction on a 10,500-square-foot greenhouse for their aquaponics farm, Mr. Ledgerwood decided it would be smart for he and his wife to get physicals and anything else checked before jumping into hard labor. Both their primary doctor and heart doctor said there were no issues and that they were completely healthy.

However, Mr. Ledgerwood did have a question about a small bump in his neck. It didn't bother him and he didn't feel any pain or have a cough, but he was curious as to what it was. He figured perhaps a lymph node had gotten stuck in an odd place. A month prior, he had visited a local doctor who performed an esophagogastroduodenoscopy, but nothing was found.

"We were pretty confident that whatever that little bump was, it was nothing," said Mr. Ledgerwood. "Because I had no problems with it there really wasn't any cause for alarm on our part."

Their local doctor had the same feeling as he checked it out, but wanted to run a CAT scan just to be sure. The next day the scan was performed and by the time the Ledgerwoods were home, they had received a call from their doctor about taking additional tests. One week later, a biopsy was performed and revealed a tumor on the base of Mr. Ledgerwood's tongue.

The first place he was referred to was UT Southwestern Medical Center. Initially, Mr. Ledgerwood wanted nothing to do with chemoradiation so he was leaning toward robotic surgery. They would meet with Baran Sumer, M.D., Associate Professor and Chief of the Division of Head and Neck Oncology. Dr. Sumer went over the surgical plan with Mr. Ledgerwood, but not wanting to rush into anything and still on the fence about the

desired treatment path, he decided to take a couple of months to figure things out.

Over the course of these two months, Mr. Ledgerwood went on a ketogenic diet and even took enzymes to get in the best health possible to prepare for his upcoming battle. He went from 220 pounds to a healthy 185 pounds; he felt great. His wife, daughter, and daughter-in-law, all registered nurses, each had ideas for his best treatment option, but the decision was his to make. Ultimately, one final weekend out to the Ozarks was the desired trip to clear their minds.

**“It was a very tough weekend,” says Mr. Ledgerwood. “We just prayed about it and thanked God for everything he had done for us. We finally had peace about it so we went back to UT Southwestern to try another outlet.”**

David Sher, M.D., MPH, Associate Professor and Associate Director of Clinical Operations in the Department of Radiation Oncology, specializes in the treatment of head and neck cancers. He’s also the lead investigator of a clinical trial, INFIELD (Involved Field Elective Volume De-Intensification Radiation Therapy for Head and Neck Cancer), which aims to reduce the total amount of radiation to certain parts of the neck.

The study is a relatively big departure from standard head and neck radiation. Like standard head and neck radiation, treatment is administered over seven weeks in the study but much of the radiation is delivered in a relatively significant dose to the lymph nodes in the left and right neck, above the jaw, and down to the collarbone. Much of that dose is an insurance policy - treating an area of the neck that may have cancer that is not known about. The dose that is delivered to the concerning parts of the neck gets about a third less dose and some parts get no radiation, a dramatic change. After four weeks, the insurance dose is stopped and the patient only continues receiving the dose to infected areas.

The Ledgerwoods admired Dr. Sher as soon as he walked in the door. Mr. Ledgerwood recalls his human factor being exceptional, as his introduction as “David” rather than “Dr. Sher” was a comforting feeling. Before he could even explain the details of the study, they knew he was the right physician for them.



“When we met Dr. Sher, I just trusted him,” says Mr. Ledgerwood. “He instilled a sense of confidence in me and there was just something about his demeanor – it was about you, not him. I wanted to go with somebody I knew had my back and I knew I was in the room with the man that I wanted to go to battle with.”

Mr. Ledgerwood underwent radiation treatments every week for seven weeks, Monday through Friday, with one day a week of chemotherapy. For the majority of the treatments, he did fine as the only side effects were issues with saliva and tasting ability and, oddly enough, hiccups from the chemotherapy. The final few weeks were rougher, as he had to use a feeding tube during the final week, but he had a number of resources available to his disposal.

After finishing treatment, the Ledgerwoods returned to UT Southwestern every few months to find out how he was progressing. In the very first follow-up visit with Dr. Sher, the results showed positive signs; his tumor was decreasing in size. Each visit the tumor continued to show progress. Monthly checkups were no longer dreaded, they were desired.

“We lived for Tuesdays for appointments,” says Mrs. Ledgerwood.

Mr. Ledgerwood returned for another routine checkup. Dr. Sher sat down with he and his wife and pulled up the scans. His tumor appeared to be all gone. Even months after, and still today, they look forward to returning to UT Southwestern, not just to see the scans, but to talk about their aquaponics farm, something Dr. Sher has grown very fond of.

“We won the minute we walked into Dr. Sher’s office. There’s nothing I wouldn’t do for that man,” says Mr. Ledgerwood. “And I just can’t emphasize enough, when you find yourself in a situation where you’re facing this kind of thing, what it means to have the type of personnel that UT Southwestern has. We couldn’t ask for more.”