

After a biopsy of a brain tumor confirmed cancer, Tim Powell faced the sobering moment of being told to get his affairs in order. His doctor gave him one to three years to live.

However, the Flagstaff businessman and father of two decided he wasn't ready to say his goodbyes, and got a referral to see Dr. Alyx Porter, a neurologist and neuro-oncologist at Mayo Clinic in Phoenix.

"She said, if you have the will to live, I have the will to treat," Powell says, recalling his first meeting with Porter in 2016. "I was like, I have a fighting chance."

Rare and Hard to Detect

Brain cancer is rare, representing only 1.3 percent of new U.S. cancer cases—or just over 25,000 people every year. But it's also pernicious, ranking as the ninth leading cause of cancer deaths, largely because there are few risk factors and no early screening. Brain and spinal cord tumors can range from noncancerous, or benign, meningioma to the fast-growing cancerous glioblastoma.

Often, patients are diagnosed after seeking medical care for symptoms like headaches, seizures, difficulty thinking or speaking, vision change, loss of feeling or numbness on one side of the body, confusion, and fatigue.

Powell had previously undergone two brain surgeries to remove a benign tumor that was entangled with his brainstem. A surveillance MRI led to the discovery of his cancer.

Treatment and Quality of Life

Brain cancer survival rates can vary. The average length of survival for patients with glioblastoma is two years. Porter's approach is to start treatment immediately, which generally includes surgery to remove the tumor, radiation, and chemotherapy.

"The more time we put behind us, the more time we'll be able to put in front of us," says Porter, who attended Temple University for medical school and co-authored Navigating Life with a Brain Tumor, which guides patients and caregivers through what to expect over the course of the illness. Chemotherapy and radiation were used to attack Powell's astrocytoma—the most common type of cancerous brain tumor.

Porter is optimistic that a personalized, case-by-case approach to treat brain cancer could be realized within this generation. "I hope, based on molecular signatures we're learning about with these tumors, we'll be able to use specific drugs based on that molecular target that will have a positive impact on survival and quality of life," she says.

Her work to improve the quality of patients' lives extends beyond the clinic to her research. In particular, she's examined the use of psychostimulants (medications that increase activity in the central nervous system and body) to improve fatigue—particularly after brain surgery and radiation. While her latest clinical trial did not indicate that the medication worked better than placebo, it did find the medication helped some patients with concentration.

Seeking Care

Seven years after his cancer diagnosis, Powell, now 59 and retired, is in remission. He's grateful for the extra years he's had with his wife and children, and he encourages people who are facing a life-changing diagnosis to get a second opinion and find the best doctor for them.

Porter likewise urges people to see their primary care physician and get a referral to see a neurologist when they notice symptoms impacting the nervous system: "We really do need to slow down and listen to our bodies."



Alyx B. Porter, M.D.