

Vaccine may give brain cancer patients time



ABC Eyewitness News Health specialist Denise Dador

LOS ANGELES (KABC) – February 14, 2011 Each year, 22,000 Americans are diagnosed with brain cancer. Glioblastomas are the most deadly types of brain tumors, but now local researchers are trying to perfect a new type of treatment that may give the gift of time.

Glioblastoma is an insidious type of cancer that is extremely difficult to treat. Even with chemo and radiation, most patients with glioblastoma live less than two years.

Michael Wulfe shouldn't even be alive, much less running six miles uphill. "Every time I do get to the top, I stop for just a second, and in my head, say a little, short prayer that here I am on top of the hill, feeling like a normal, perfect, healthy person," Wulfe said.

Wulfe was diagnosed with glioblastoma nearly four years ago. Doctors believe Wulfe is still alive thanks to an experimental vaccine that targets the difficult-to-treat cancer.

With glioblastomas, surgeons can remove 99 percent of the tumor. The problem is what you can't see - tiny, microscopic cells that are left behind multiply and resist treatments. Those cells are like roots of a weed, and the weed keeps growing if there's still a root.

"If that cell is left behind, then tumors can always grow from them," said Dr. John S. Yu of Cedars-Sinai Medical Center.

The vaccine targets the root. Doctors draw a patient's blood and isolate something called Dendritic Cells. They then place special proteins on those cells and inject them back into the patient. The "smart" cells ignite the immune system and tell it to attack the bad tumor cells.

"Instead of going after the entire army, we're going after the general or the emperor," Yu said.

Three vaccines are given two weeks apart. In a phase-one study, the survival of patients jumped from 26 percent to 80 percent.

Wulfe was one of the lucky ones. He's still cancer-free and enjoying the freedom of the outdoors. He is a man who continues to defy the odds with every hill he climbs.

"You clear your head of everything. I'm a normal person, huffing to get air into lung and make it up the hill," Wulfe said.

Doctors say the vaccine has fewer side effects than traditional therapies because it activates the immune system and doesn't destroy it like chemotherapy.