UAMS Performs First GammaTile Brain Surgery in Arkansas

LITTLE ROCK — Radiation oncologist Richard Crownover, M.D., Ph.D., and neurosurgeon Analiz Rodriguez, M.D., Ph.D., and their care team at the University of Arkansas for Medical Sciences (UAMS) have performed the state’s first application of GammaTile Therapy.

GammaTile Therapy, marketed by GT Medical Technologies and also known as surgically targeted radiation therapy (STaRT), is designed to delay brain tumor recurrence. It consists of a 3D-collagen tile embedded with a cesium radiation source. GammaTile is placed in the tumor cavity at the time of surgery so that it immediately begins to target residual tumor cells with radiation while limiting the impact on healthy brain tissue.

“GammaTile Therapy is a welcome addition to our treatment options available to brain tumor patients,” said Rodriguez, who serves as the director of Neurosurgical Oncology at UAMS. “Small wafers are implanted around the tumor site when it’s removed and are slowly absorbed by the tissue as the radiation treatment is delivered.”

GammaTile Therapy, approved by the Food and Drug Administration in 2019, is the only radiation therapy specifically designed for use in the brain and offers advantages for patients undergoing surgery for brain tumors. GammaTile begins targeting residual tumor cells immediately at the time of tumor removal surgery while avoiding damage to healthy brain tissue. In addition, the burden of radiation treatment is reduced. Patients receive treatment while going about their daily lives and require no additional trips to the hospital or clinic for radiation therapy.

Steve Boyer, 63, of Horseshoe Bend, was the first patient in Arkansas to receive the GammaTile Therapy. An Air Force veteran originally from Connecticut, Boyer first noticed something wrong when his leg started shaking one day at church. Diagnosis revealed a brain tumor. Surgery to remove it was incomplete because of its location near a large blood vessel, and the tumor grew back despite receiving radiation therapy following his initial surgery.

On June 14, Boyer became the first patient in Arkansas to undergo GammaTile Therapy during a second surgery to remove the tumor.
“Mr. Boyer had a tumor grow back despite having previous surgery and radiation. In this situation we can perform another surgery, but typically we are limited with giving any further traditional radiation,” said Rodriguez.

“Thankfully, with GammaTile we can administer local radiation despite someone having received radiation in the past. Initial studies with GammaTile have been promising in reducing regrowth of brain tumors,” she added. “We are excited to provide this service to people like Mr. Boyer who have limited options and unfortunately have an aggressive tumor that can regrow in the future.”

Boyer has been discharged from the hospital and is recovering well, Rodriguez said.

In order to do this treatment, extensive planning and coordination between the radiation oncology and neurosurgery teams was required, including specialized training for the operating room and nursing staff.

UAMS is the state’s only health sciences university, with colleges of Medicine, Nursing, Pharmacy, Health Professions and Public Health; a graduate school; hospital; a main campus in Little Rock; a Northwest Arkansas regional campus in Fayetteville; a statewide network of regional campuses; and seven institutes: the Winthrop P. Rockefeller Cancer Institute, Jackson T. Stephens Spine & Neurosciences Institute, Harvey & Bernice Jones Eye Institute, Psychiatric Research Institute, Donald W. Reynolds Institute on Aging, Translational Research Institute and Institute for Digital Health & Innovation. UAMS includes UAMS Health, a statewide health system that encompasses all of UAMS’ clinical enterprise including its hospital, regional clinics and clinics it operates or staffs in cooperation with other providers. UAMS is the only adult Level 1 trauma center in the state. U.S. News & World Report named UAMS Medical Center the state’s Best Hospital; ranked its ear, nose and throat program among the top 50 nationwide; and named six areas as high performing — COPD, colon cancer surgery, heart failure, hip replacement, knee replacement and lung cancer surgery. UAMS has 2,876 students, 898 medical residents and four dental residents. It is the state’s largest public employer with more than 10,000 employees, including 1,200 physicians who provide care to patients at UAMS, its regional campuses, Arkansas Children’s Hospital, the VA Medical Center and Baptist Health. Visit www.uams.edu or www.uamshealth.com. Find us on Facebook, Twitter, YouTube or Instagram.

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