Why a brain tumor survivor brought his guitar into the OR

This story originally appeared on MD Anderson's Cancerwise blog.

When Robert Alvarez was diagnosed with a low-grade insular brain tumor in 2013, he decided to hope for the best and postpone treatment.

“The doctors told me surgery could leave me paralyzed,” Robert recalls. He noticed increasing headaches and clumsiness, but the symptoms were still manageable. As an active 19-year-old athlete and musician, Robert felt the risks of surgery were worse than living with the brain tumor.

“I just hoped it wouldn't grow and tried to be careful,” he says. After high school, Robert moved from San Antonio to Chicago to pursue a music career and start vocational school in audio engineering. Meanwhile, his mother began researching neurosurgeons and hospitals for the future.

A love of music

In Chicago, Robert started a metal band with a few friends. His brain tumor served as the inspiration for the band's name: Death from Within.

Robert had started playing the guitar at age 12, inspired by an eclectic mix of music, ranging from 90s hip-hop to heavy metal.

“I picked it up fast,” Robert says. “I like to bump it – just turn the amp up and jam when everyone else leaves the house.”

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Clinical Trials
We have more than a dozen clinical trials available, including newly diagnosed and recurrent glioblastoma, meningioma, ependymoma and brain metastases. A few open trials are listed below.

See more trials, details and enrollment information: mdanderson.org/neuroclinicaltrials

Brain Tumor Survivor
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The road to MD Anderson
After a few years in Chicago, Robert began to notice new symptoms.

“I would wake up at night feeling weird, and I’d run to look at myself in the bathroom mirror,” he says. “One night, I fell out of bed. My roommate heard me hit the wood floor and came to check on me.”

Robert was having seizures – a common brain tumor symptom – in his sleep. Robert woke up in the hospital, with his dad at his bedside. By then, his mother already knew the next step: MD Anderson.

Comfort in confidence
When Robert was first diagnosed, he didn’t feel comfortable having surgery to remove the brain tumor. That changed when he came to MD Anderson and met neurosurgeon Sujit Prabhu, M.D., in the Brain and Spine Center.

“Dr. Prabhu told me I would be OK. That’s what I wanted to hear,” Robert says. “I could tell he was confident in what he did. With other doctors, there was no guarantee.”

Because Robert’s tumor was located near the parts of his brain that controlled speech and movement, Prabhu recommended an awake craniotomy. During this type of procedure, the patient is woken up during surgery to help map and safely preserve those critical functions as the brain tumor is removed.

“Dr. Prabhu asked me, ‘What do you do?’ I told him, ‘I play the guitar; that’s all I do,’” Robert recalls. “He said ‘OK’ and looked like he was thinking.”

What Prabhu suggested next had never been done before at MD Anderson: he asked Robert if he’d feel comfortable playing his guitar during an awake craniotomy. The goal was to ensure the surgery wouldn’t harm Robert’s ability to play music.

Playing guitar during brain surgery
Normally, Robert plays an electric guitar with an amp. That wouldn’t work in the BrainSuite®, a special operating room at MD Anderson with an intraoperative MRI scanner – a 1.5 tesla magnet. So, Robert bought an acoustic guitar for the occasion.

The day before surgery, Robert visited the BrainSuite with Prabhu and the surgical team. Together, they decided how to comfortably position Robert so that he could play guitar on the operating table.

The preparation paid off. On the day of Robert’s surgery, everything went according to plan. Prabhu successfully removed 90% of Robert’s tumor, which was confirmed to be a grade II astrocytoma, and left his musical talents intact. This summer, Robert will begin proton therapy under the care of Debra Yeboa, M.D., to treat the remaining tumor tissue.

“It feels great to be playing guitar again,” Robert says. “Dr. Prabhu is amazing, and I’m glad he woke me up to play. I can’t wait to get back in the studio with my band.”

<< Watch Robert play his guitar in the BrainSuite® operating room, and hear neurosurgeon Sujit Prabhu, M.D., and neuroanesthesiologist Shreyas Bhavsar, D.O., explain the procedure.
Awake craniotomy for brain tumors

Read the full article on the Cancerwise blog.

Imagine being able to talk to your doctors during brain tumor surgery without pain and give them immediate feedback while they operate. That's exactly what happens during an awake craniotomy.

A craniotomy is a type of surgery where a piece of the skull is temporarily removed to access the brain. In an awake craniotomy, the patient is woken up during surgery. MD Anderson doctors perform more than 90 awake craniotomies every year.

This highly specialized surgical procedure requires a team approach led by an experienced neurosurgeon and a neuroanesthesiologist. To learn more, we spoke to neurosurgeon Jeffrey Weinberg, M.D., and neuroanesthesiologist Shreyas Bhavsar, D.O.

What's the benefit of being awake during brain tumor surgery?

Our goal is to remove as much of the tumor as possible, as safely as possible. When a tumor is near an area of the brain that controls critical functions — such as speech, language or movement — an awake craniotomy is the best way to identify and safely preserve those abilities.

We know where certain functions are generally located on the brain's surface. But below the surface, bundles of nerves pass through the brain to the spinal cord and throughout the body. We have to map these nerves to understand which ones are connected to key functions, so that we can avoid them as we remove the tumor. Damaging critical nerves could cause permanent disability.

We also use other tools to map brain function, but mapping nerves during an awake craniotomy is the only way to obtain immediate feedback during surgery.

Which patients are candidates for awake craniotomies?

Awake craniotomies are frequently — but not always — used for gliomas (including glioblastoma, astrocytomas and oligodendrogliomas). These brain tumors tend to occur in the frontal and temporal lobes, which control speech and motor function. The patient also has to feel comfortable with the idea of waking up during surgery. A patient with severe symptoms may not be able to effectively contribute to the neurological exams during surgery. A neuropsychological evaluation can help determine if the patient has deficits or would be a good candidate for this procedure.

How is it possible to wake up during brain surgery without feeling pain?

Brain tissue doesn't have any pain fibers, so while you may feel pressure or vibrations from the surgery, you shouldn't feel pain. We use a local anesthetic (similar to those used at a dentist's office) to numb the muscles, skin and bone that the surgeon has to cut through to get to the brain.

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MD Anderson BEST

A brain tumor support group

MD Anderson BEST (Brain tumor Education and Support Together) is a monthly education and support group for patients diagnosed with brain tumors.

Each month features a different expert guest speaker, followed by a discussion/support group led by the Brain and Spine Center social work counselors.

Lunch and valet parking validation are provided at no cost to attendees.

MD Anderson BEST
Second Tuesday of each month
12 to 1:30 p.m.
Brain and Spine Center

Upcoming meetings and topics:

June 12: Cognitive changes
July 10: Advance care planning
Aug. 14: Nutrition

Follow the MD Anderson Brain and Spine Facebook page (facebook.com/MDAndersonBrainandSpine) for updates and event reminders about each meeting.

Pre-registration is appreciated, but walk-ins are also welcome. Questions and registration: Amy Bragman, 713-563-7728

NEW: Join online!

You can now join our BEST meetings remotely, from your computer, tablet or smartphone.

Email Amy Bragman at ASBragman@mdanderson.org to get access to join the support group from any location.