

Awake for brain surgery to remove a tumor

Intro: A brain tumor diagnosis was made worse for Melissa Whiley of Gainesville, Florida when she was told the mass location made surgery to remove it dangerous, if not impossible.

Then she came to Mayo Clinic and learned about an operation that would make her an active part of removing her tumor. It's called "awake brain surgery."

VIDEO	AUDIO
	"Riders, ready? Watch the gate."
	<i>Beep, beep, beep.</i>
	<i>Sound of bike-racing gate opening</i>
	Melissa Whiley loves to race, so being sidelined was tough.
Melissa Whiley	"Sitting still and not feeling good, it's not really my jam."
	<i>Sound of a bike passing the camera</i>
	But something big put the brakes on this active 40-year-old.
Title: Melissa Whiley Patient Mayo Clinic	"... collapsed in the hotel we were staying at — blacked out. I don't know what, you know, what happened or how long I was out."
Title: Kaisorn Chaichana, M.D. Neurologic Surgery Mayo Clinic	"Melissa basically had a rare type of a low-grade glioma or a grade 2 glioma."
	A brain tumor. And there was more bad news for Melissa and her husband, Chris.
Dr. Chaichana	"Unfortunately, her tumor is right in that area that controls speech — her ability to pronounce words."

	It was also near important areas of the brain that form memories.
	Neurosurgeon Dr. Kaisorn Chaichana says leaving it in place could mean more problems.
Dr. Chaichana	"That glioma could become a higher-grade glioma, or lead to more seizures or be catastrophic."
	On the other hand, surgery to remove the tumor had the potential to compromise Melissa's speech.
Melissa Whiley	"It was scary. To not be able to communicate would literally be my worst nightmare."
	But Dr. Chaichana had seen this type of tumor before, and he knew how to remove it without harming Melissa's ability to communicate.
Melissa Whiley	"He said, 'We're going to have to do an awake craniotomy.' And my body felt like Jell-O. And I couldn't catch my breath. Really, I was, like, 'What?'"
.	<i>Sounds of machines running within an operating room</i>
Graphic: Awake craniotomy Awake brain surgery	Awake craniotomy or awake brain surgery — seen here being done on another patient — allows a Mayo Clinic surgical team to ask questions ...
Subtitle: "Tell me what it is."	"Tell me what it is."
	.. and monitor activity in the brain during the responses.
	<i>Sound of an operating room machine beeping</i>
Subtitle: "This is a raccoon."	"This is a raccoon."
Subtitle: "Good."	"Good."
	This back-and-forth helps ensure the surgery to remove a tumor isn't affecting the patient's communication and cognition skills.
Dr. Chaichana	"A lot of centers perform awake surgery, but we take it one step further."
Dr. Chaichana	"We rely on a multidisciplinary team to do the surgery."

Melissa Whiley	"It was surreal. It was — I don't — I don't even know how to describe it."
Dr. Chaichana	"We put her asleep for the opening part, which means making the incision and removing the bone overlying the lesion. Then we woke her up."
Melissa Whiley	"And you could see them all working together in surgery, and it was a well-oiled machine."
Dr. Chaichana	"She participated in all these activities — naming objects, executive function, calculations and memory."
Graphic: Awake brain surgery tests Language Problem-solving Reasoning Hearing Vision Memory	The team of specialists was testing Melissa's language, problem-solving and reasoning skills, hearing, vision, and her memory to ensure they could resect the tumor area safely without compromising cognitive function.
Melissa Whiley	"It's just fascinating that they can avoid all of that ... super-eloquent tissue to just get the tumor."
	Thanks in part to Melissa's help, the surgery was a success.
Dr. Chaichana	"So the scans look perfect. I don't see any residual ..."
Melissa Whiley	"Are you serious?"
Dr. Chaichana	"There's no residual tumor. Yeah."
Melissa Whiley	"I will never know how you can do that."
Dr. Chaichana	"But you allowed us to help you, and now it looks good."
Melissa Whiley	"That is just incredible."
	Just a few months later, Melissa's back at the track, ...
Melissa Whiley	"Of course I got back on that bike."
	...on the go and pedaling toward another goal.
Melissa Whiley	"Feels awesome to go."

	<i>Sound of a bike's wheels hitting the track after a jump</i>
Melissa Wwhiley	"I feel amazing. Awake craniotomy — totally worth it."
	For the Mayo Clinic News Network, I'm Jeff Olsen.

Tag:

Sometimes patients who've had glioma-removal surgery also need radiation and chemotherapy. But her doctors say Melissa won't need further treatment, other than regular check-ins.