

VIDEO: Making brain surgery safer with advanced technology

Treatment for meningiomas, the most common type of brain tumor, is now safer thanks to technological advancements. At Mayo Clinic, navigation tools and precision imaging help surgeons operate with greater accuracy, improving patient outcomes.

Dr. Victoria Clark, a Mayo Clinic neurosurgeon and researcher, focuses on finding better treatments for patients with meningiomas, now and in the future.

Video.

Audio

	Meningiomas are usually noncancerous tumors that form in the membranes surrounding the brain.
	It may sound strange, but some of these tumors may not need treatment, says Mayo Clinic neurosurgeon Dr. Victoria Clark.
Victoria Clark, M.D., Ph.D. Neurosurgery Mayo Clinic	"But for the ones that grow or for the ones that cause symptoms, they do require treatment, which is either surgery and/or radiation."
	The goal of the surgery is to take out as much of the tumor as possible.
	"Meningiomas have this tendency to enwrap very critical structures, like the types of nerves that control sight or control hearing, facial expression, and also encircle around critical blood vessels."
	She says better tools allow for better outcomes.
	"We have what's called navigation so that allows us to use a pre-op MRI, sort of a GPS for the brain, to know exactly where the tumor is in relationship to the structures that we're trying to preserve and avoid."
	Advanced imaging tools used in the operating room help ensure surgeons remove all the tumor.
	"Brain surgery is much safer with all of these wonderful new technologies."
	While these advancements help patients now, Dr. Clark is looking to the future.
	"My hope is that the research that we will do will create new medical treatments that can be used in combination with the surgeries and radiation that are currently available in order to improve the treatment for patients with meningiomas."
	For the Mayo Clinic News Network, I'm Jason Howland.