Mayo Clinic Minute: How gamma knife surgery treats brain tumors

VIDEO	AUDIO
	It's called gamma knife surgery, but there's no cutting involved.
Bruce Pollock, M.D. **Neurologic Surgery** **Mayo Clinic**	"Gamma knife radiosurgery is the precise delivery of radiation to some imaging-defined target and, so, we're able to treat benign, malignant tumors within the brain."
	It's been used at Mayo Clinic for 30 years as an alternative to open brain surgery.
	"We're performing an outpatient-based procedure that doesn't require an incision, has no risks of infections."
	The patient's head is held still during the procedure with a headframe, which also serves as a map for the radiation. Using 3D imaging — typically an MRI — as a guide, the gamma knife is targeted directly at the tumor.
	"The mechanical accuracy of the device is measured as a fraction of a millimeter."
	And with no hospital stay and minimal side effects, it's a procedure that is efficient and can be lifesaving.
	"For malignant tumors, the success rate per tumor typically is on the order of 90% or more. For benign tumors that are well-selected, the success rate really ranges up to about 95% to 97%."
	For the Mayo Clinic News Network, I'm Jason Howland.