

Less brain swelling occurs with multiple sessions of SRS for common brain tumor

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Treating a common brain tumor with multiple sessions of radiation appears to result in less brain swelling than treating the tumor once with a high dose of radiation, say researchers from the Lombardi Comprehensive Cancer Center at Georgetown University Hospital.

Benign [brain tumors](#) known as meningiomas are often treated with a single, high dose of radiation using stereotactic radiosurgery (SRS). At Georgetown, SRS is conducted using CyberKnife. A single SRS treatment leads to good tumor control; however, post-treatment swelling ([edema](#)) is a common and potentially serious complication.

In a study presented today at the 51st Annual Scientific Meeting of the American Society for Radiation Oncology in Chicago, the Georgetown researchers say there appears to be a safer option.

"Like the single dose, delivering lower doses of radiation in three, four or five CyberKnife sessions leads to good control," says Georgetown's Christopher Lominska, MD, lead author of the study and chief resident in radiation medicine. "The multiple sessions have the added bonus of causing less edema."

For the study, researchers reviewed the records of 81 patients treated at Georgetown from April 2002 to April 2008. "Edema tended to occur less often in the patients who received multiple SRS treatments," Lominska says. "Three, four or five treatment sessions with the CyberKnife appear to result in a low edema rate equivalent to

conventional radiation therapy which often involves 30 treatment sessions. That means SRS with CyberKnife allows good [tumor](#) control with fewer side-effects, and in less time than conventional therapy."

Source: Georgetown University Medical Center ([news](#) : [web](#))

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