

Pinpointing and Eradicating Brain Tumors

STEREOTACTIC RADIOSURGERY AND STEREOTACTIC RADIOTHERAPY

The team of physicians at Northeast Radiation Oncology Center (NROC) offers cancer patients in Northeastern Pennsylvania with certain types of brain tumors the opportunity to benefit from a remarkable radiation treatment technology known as stereotactic radiosurgery or stereotactic radiotherapy.

What is stereotactic radiation treatment?

This very specialized radiation treatment technique delivers extremely high doses of radiation very precisely to minute areas of the brain to eradicate cancerous brain tumors, without destroying surrounding healthy tissue. It is effective for cancer that originally developed in the brain and for cancer that has spread (metastasized) to the brain from another primary site.

What is the difference between the two types of stereotactic treatment?

Stereotactic radiosurgery refers to a single treatment, which may be sufficient for small tumors that are easily targeted by the radiation beam. Stereotactic radiotherapy refers to multiple treatments, which are necessary for larger tumors that are more difficult to treat. For these tumors, treatments over several days greatly increase the effectiveness and decrease the risk for the patient.

How do these stereotactic treatments differ from other treatment options for brain tumors?

These treatments to destroy brain tumors are delivered by a radiation therapy linear accelerator machine, or "X-knife" technology, which is superior to and far less costly than alternative treatment currently available.