

Stereotactic Radiosurgery

Stereotactic radiosurgery, also called stereotactic radiotherapy or stereotaxy, is an alternative to conventional radiotherapy that allows highly targeted radiation to be delivered directly to small tumours while avoiding healthy brain tissue. The term radiosurgery is used because the destruction is so precise that it acts almost like a surgical knife. Benefits of stereotactic radiosurgery include:

- Stereotaxy allows precisely focused, high-dose beams to be delivered to gliomas smaller than 1.25 inches in diameter with less damage to surrounding tissues.
- Stereotactic radiosurgery can help reach small tumours located deep in the brain that were previously considered inoperable.
- Sometimes with stereotaxy only a single treatment may be needed.
- Unlike traditional radiotherapy, stereotactic radiotherapy can be repeated, so it is useful for recurrent tumours when a patient has already received standard radiation treatments.
- Combining stereotaxy with techniques that evaluate speech and other mental functions in patients who are awake during the procedure can allow removal of brain tissue with a lower risk for complications in areas that affect such functioning.