

Stereotactic Radiation Therapy: Expanding Capabilities

Modern image-guided radiation therapy (IGRT) technologies are improving the precision of tumor targeting—even for tumors that are moving or changing over the course of treatment. As a result, doctors are able to reduce the duration of treatment for some patients. Conventional treatments and IMRT are typically delivered over a period of 6-8 weeks. Using IGRT, doctors may be able to treat some tumors in less than a week. This accelerated schedule is

termed “stereotactic radiotherapy” or “stereotactic radiosurgery.”

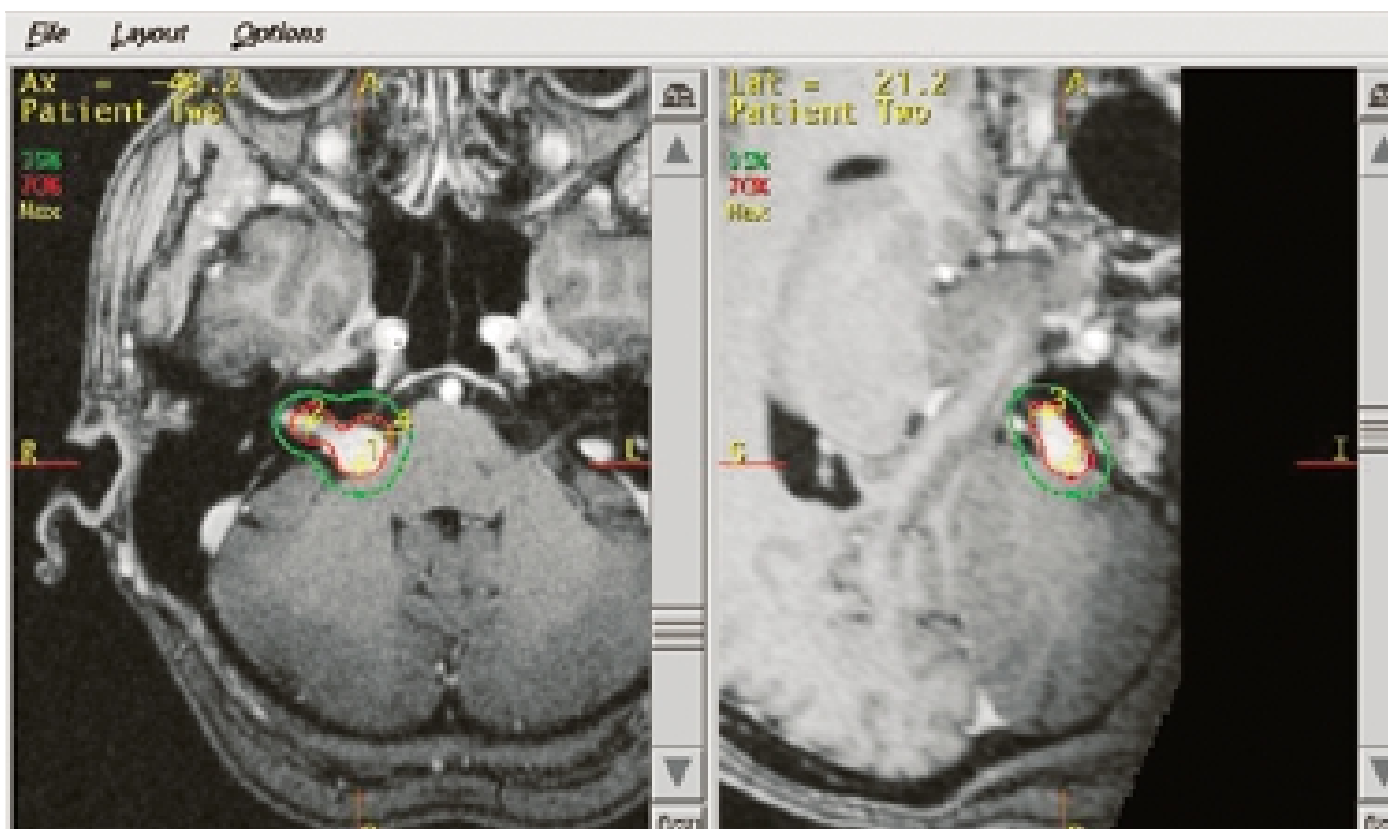
Up to now, stereotactic approaches have been used primarily by neurosurgeons to treat brain cancer, requiring special-purpose devices. Now, Varian is bringing this capability to general radiation therapy.

During 2003, the company developed the world’s first image-guided radiation therapy system optimized for both conventional and

stereotactic approaches to treating cancer. The versatile Trilogy™ system, with built-in IGRT hardware and software, is designed to deliver 3-D conformal radiotherapy, IMRT, stereotactic radiosurgery, fractionated stereotactic radiation therapy, and intensity-modulated radiosurgery.

“We have designed the first practical, clinically-viable system for delivering all forms of external-beam radiation therapy,” said Timothy

Guertin, president of Varian’s Oncology Systems business. “Varian’s goal is to enable radiation oncologists to deliver the full spectrum of treatments, all on one machine in a single room.” ■



A treatment plan for the stereotactic treatment of an intracranial tumor.