

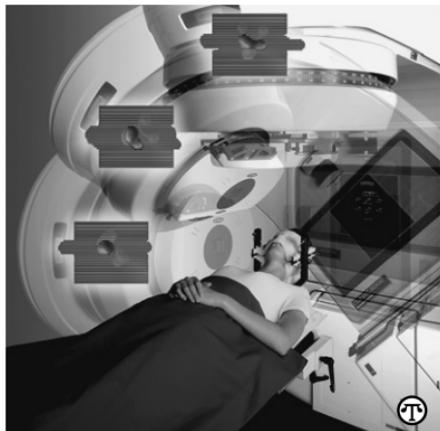
# Safer Brain Surgery

(NAPSA)—New types of technology have helped doctors treat brain tumors in a safer and more effective manner. An estimated 350,000 people in the U.S. have brain tumors, and many of them could benefit from the new technology.

Brain tumors are the leading cause of death from childhood cancers among persons up to 19 years old; the second-leading cause of cancer-related death in males ages 20 to 39; and the fifth-leading cause of cancer-related death in women of that same age group.

Brain tumors are often hard to treat because there is risk of damaging healthy brain tissue surrounding the tumor. “If, for example, a tumor is in the middle of the brain, surgery can present a risk to the tissue above, next to and below it,” explains Dr. Xiang Gao, MD, Radiology Oncologist at the Central Arkansas Radiation Therapy Institute (CARTI) in Little Rock, AR. Fortunately, says Dr. Gao, new medical breakthroughs are helping make tumors more operable.

One new technology, Stereotactic Radiosurgery (also known as non-invasive shaped-beam radiosurgery), actually lets doctors perform brain surgery without making an incision. Doctors use the non-invasive radiation treatment to accurately pinpoint and diffuse tumors surrounded by delicate brain structures and tissue without damaging that tissue. The result is a treatment that can



**New technology—Stereotactic Radiosurgery lets doctors treat tumors previously thought inoperable.**

be used for many conditions previously thought to be inoperable.

Dr. Gao says the key to the device is its extreme accuracy. It uses X-rays and infrared technology as a guidance system that localizes and specifically targets lesions and tumors. Doctors then use the device's high-dose photon beams to disrupt the DNA of the tumor cells, causing the cells to die, rather than reproduce.

CARTI, which offers this new technology, says typical treatments last 15 to 20 minutes and that patients remain awake for the procedure. Patients can usually return to their normal routine within hours of the surgery.

For more information, visit [www.carti.com](http://www.carti.com).