Neurosurgeons

Stereotactic radiosurgery is nothing new in neurosurgery. In fact, radiosurgery has long been the domain of neurosurgeons (and radiation oncologists) because of its singular usefulness in the treatment of intracranial lesions.

At CyberKnife of Southern California at Vista, we're innovating how you treat intracranial tumors and AVMs with stereotactic radiosurgery. During CyberKnife® treatment, imaging cameras determine the actual location of the lesion. Each time the robotic arm repositions to deliver another fraction of the ablative dose, CyberKnife recalculates the true position of the target. The result is unsurpassed, submillimeter accuracy. And because there is no need for the stereotactic frame that Gamma Knife® requires, overall treatment time is reduced, anesthesia is unnecessary and the process is painless and comfortable. Also, without the frame, treatment can be delivered in fractions (up to five sessions), if necessary, to spare surrounding healthy tissue.

Yet, CyberKnife goes beyond intracranial lesions. Because highly accurate stereotaxy is achieved without a frame, your ability to treat radiosurgically now includes tumors and lesions of the spine. And at CyberKnife of Southern California at Vista, we use the very latest CyberKnife hardware and software, including the world's first next-generation linear accelerator. In other words, we give you the power to treat more patients with improved accuracy, in less time and with less patient risk and discomfort than is possible with Gamma Knife.

CLINICAL INDICATIONS FOR CYBERKNIFE.

With CyberKnife, the range of tumors treatable with stereotactic radiosurgical ablation has increased... and now includes extracranial lesions. Here are the clinical indications for which you can give your patients state-of-the-art treatment...

- Astrocytoma, glioma, glioblastoma multiforme, oligodendroglioma – CyberKnife offers superior conformance to tumor shape, which is important for future treatment for recurrence. CyberKnife can also irradiate the tumor bed to delay recurrence.
- Brain metastases – Radiosurgery may be equal to surgery for single metastases... and better for multiple metastases. Advanced imaging allows CyberKnife to treat those that are widely dispersed.
- Spinal tumors – CyberKnife is regularly used to treat spinal metastases. It may also serve as primary or follow-up treatment for meningioma, schwannoma, neurofibroma, hemangioblastoma, chondrosarcoma, chordoma, giant cell tumor, myeloma, lymphoma, osteosarcoma, Ewing sarcoma, aneurismal bone cysts and ependymoma.
- Pituitary adenoma – CyberKnife's staged treatments may help avoid the risk of visual loss and other side effects associated with single-session radiosurgery. Its superior conformance minimizes irradiation of normal tissue, including the optic chiasm and hypothalamus.
- Hemangioblastoma – CyberKnife noninvasively ablates the tumor nodule, usually in one session, even in hard-to-reach areas. This is especially beneficial for von Hippel Lindau patients who can become disabled by multiple surgeries.
- Skull base tumors – The proximity of these tumors to vital nerve and vascular structures makes them surgically problematic. Risk of injury, infection and residual tumor growth make CyberKnife a leading treatment.
- Chordoma – While chordomas are radioresistant and close to vital structures, superior conformance and staged sessions permit higher doses and repeat treatments. CyberKnife should be considered as an initial treatment option.
- Meningioma – For smaller meningiomas, radiosurgery is an ideal therapy. CyberKnife is especially safe for meningiomas adjacent to critical structures because it can be delivered in fractions.
- Neurofibroma & schwannoma – While these tumors' resistance to radiation makes conventional radiotherapy an option only when surgery is not, CyberKnife's conformance makes it an effective alternative to radiation therapy and surgery for selected patients.
- Acoustic neuroma – Studies show that CyberKnife treatment in stages offers the highest rates ever achieved for hearing and facial-nerve preservation.
- Trigeminal neuralgia – Unlike invasive therapies and conventional radiotherapy, CyberKnife is painless, frameless, less risky and therefore more easily repeated to treat recurrence.
- Intracranial AVMs – With CyberKnife, we can treat locations that can't be safely approached with microsurgery or endovascular therapy. AVMs have an 80% chance of disappearing in a single treatment session. CyberKnife can also be used in conjunction with other therapies to remove remnants.
- Spinal AVMs – CyberKnife is the first system to offer radiosurgical treatment of spinal AVMs... and provides the same accuracy and success as for intracranial AVMs.

cyberknife
OF SOUTHERN CALIFORNIA AT VISTA
Radiosurgery pioneers. Renowned expertise. The trusted authority.

902 SYCAMORE AVENUE, VISTA, CA 92081 | TEL: 760-734-3750 | TOLL-FREE: 888-54-CYBER (29237) | FAX: 760-734-3766
WWW.CYBERKNIFEOFSOCAL.COM