

Back to the Future

Ablation System Provides Pain Relief for Cancer Patients with Metastatic Spinal Tumors

Eisenhower Medical Center is the first hospital in Riverside County, and one of only two hospitals on the West Coast, to utilize a new radiofrequency ablation system that delivers energy directly into a metastatic spinal tumor, providing palliative pain relief to cancer patients.

Board Certified Radiologist Jerry Chang, MD successfully performed the procedure using DFINE's STAR™ Tumor Ablation System — a radiofrequency ablation system recently approved by the United States Food and Drug Administration. The STAR system is designed specifically for spine tumors. The procedure was performed in the hospital's advanced bi-planar state-of-the-art angiography suite.

Radiofrequency ablation is a cancer therapy in which a needle electrode is used to deliver energy directly into a tumor to heat and destroy cancer cells and to provide palliative pain relief. The STAR Tumor Ablation System uses a navigational imaging tool to target tumors in the spine which can develop from bone, prostate and breast cancers.

While the patient is under anesthesia, the physician inserts a needle into the vertebrae, then the radiofrequency probe through the needle into the tumor. The radiofrequency energy burns away tumor cells. In most cases if there is also a fracture present, the physician can quickly do a vertebral augmentation to treat the fracture by injecting medical cement to prevent structural collapse of the spine. The entire procedure takes approximately an hour or less. Patients can return to their normal activities within days instead of months.

Dr. Chang is one of three specialists (including Mehran Elly, MD and Brian Herman, MD) at Eisenhower who has extensive experience performing this procedure, making Eisenhower one of the leading centers in the country for vertebral augmentation.