Gamma Knife Surgery
at San Antonio Regional Hospital

For more than a century, San Antonio Regional Hospital has served the Inland Empire with leading therapies and high standards of patient care. We provide comprehensive service across a full range of disciplines, with more than 2,000 staff members and 500 physicians.

Our cancer center provides radiation oncology services on-site, including intensity-modulated radiation therapy and brachytherapy, as well as medical and surgical oncology. We employ a multidisciplinary team approach for continuity of care.

To refer a patient, or to learn more about the Southern California Regional Gamma Knife Center at San Antonio Regional Hospital, please call 877.428.7224.
The Perfexion Gamma Knife is a state-of-the-art system for minimally invasive brain surgery. It is not a knife in the usual sense. There is no blade or incision involved. Instead, the Gamma Knife uses low-dose radiation to target abnormal cells with greater precision than open surgery, producing better clinical results without the side effects of traditional neurosurgery.

**How It Works**

Using 192 low-dose gamma beams, the Gamma Knife sculpts radiation with extraordinary precision, targeting abnormal structures with an amplified dose wherever the beams intersect. This cross-targeting allows the disruption of DNA sequencing in abnormal cells, halting their growth, while leaving the surrounding tissue almost entirely unaffected.

**A Generation Ahead**

The Elekta Perfexion® Gamma Knife system provides physicians with a new level of speed and precision for radiosurgery of the head and neck. With its improved dosimetry and expanded treatable volume, the Perfexion vastly increases the number of patients who qualify for treatment.

- **Improved Dose Sculpting**
  Improvements to the collimator provide a virtually unlimited capacity for sculpting the dose distribution. The Perfexion conforms to the most intricate 3-D targets within a fraction of a millimeter.

- **Expanded Volume**
  The Perfexion system offers a dramatically larger treatable volume, while maintaining full clinical compatibility with Gamma Knife protocols based on hundreds of thousands of cases.

- **Faster Targeting**
  The fully-automated, single push-button approach saves between 30 and 60 minutes per session over previous Gamma Knife systems, or up to five weeks of physician time per year.

- **Single-Session Efficiency**
  The Perfexion Gamma Knife can treat one or several lesions in one session, for better efficiency and continuity of care.

- **GammaPlan PFX Software**
  The next generation control system gives physicians a new level of ease and precision. Among its key improvements: remote planning, multiple users, and patient database access.

**Advantages of Gamma Knife Surgery**

- **Shorter Hospitalization**
  Patients typically leave the hospital on the day of their treatment and resume normal activities shortly thereafter. The recovery period is much shorter and less traumatic than that of conventional surgery.

- **Lower Costs**
  The Gamma Knife’s short recovery time eliminates most of the hospitalization costs of conventional surgery. It is covered by most PPOs and HMOs, as well as Medicare and MediCal.

- **Clinically Proven**
  With more than two decades of clinical practice and thousands of peer-reviewed articles, the Gamma Knife is one of the best documented radiosurgery tools in the world today.

**Gamma Knife Indications**

- **Malignant Tumors Treated (43.3%)**
  Metastatic Tumor 82%, Malignant Glial Tumor 14%, Other Malignant Tumors 4%

- **Benign Tumors (35%)**
  Meningioma 36%, Vestibular Schwannoma 26%, Pituitary Adenoma 23%, Other Benign Tumors 15%

- **Vascular Disorders (13.7%)**
  AVM 89%, Other Vascular Disorders 11%

- **Functional Targets (7.6%)**
  Trigeminal Neuralgia 83%, Epilepsy Target 8%, Parkinsonian Target 4%, Other Functional Targets 5%

- **Ocular Disorders (0.4%)**
  Uveal Melanoma 1,354, Glaucoma 210, Other Ocular Disorder 65