

CYBERKNIFE®

Painless Radiosurgery Treatment

The CyberKnife is a groundbreaking and unique radiation therapy that uses cruise missile guidance technology to accurately locate and target tumors. Its flexible robotic arm provides unparalleled access to previously unreachable tumors. And, because CyberKnife is noninvasive, doctors can treat multiple lesions and tumors without making a single incision. The CyberKnife also provides a viable option for those patients previously diagnosed with inoperable tumors.

As a CyberKnife patient, you benefit from:

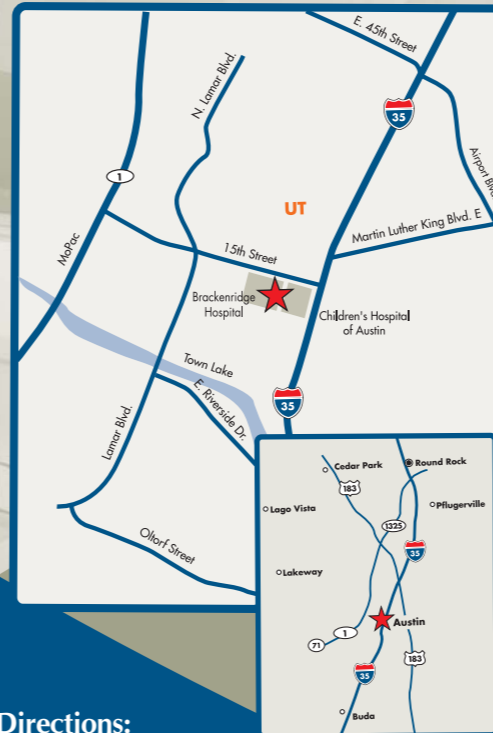
- No Incisions
- No Pain
- Bloodless Procedure
- No Stereotactic Frame (as used with the Gamma Knife)
- Generally No Anesthesia
- No Recovery Time
- Immediate Return to Normal Activity

Contact Information

For more information, call 512-324-3115, or visit brainandspine.net/cyberknife.

Directions: From IH-35 (Traveling from the North)

- Exit MLK/15th Street
Exit (exit 235A)
- Follow the signs to 15th Street
- Continue past the 15th Street light
- Take the first driveway to your right, past 15th Street (Entrance to Children's Hospital)
- Turn right into the driveway, go around the island, and take the first entrance into Children's Hospital Parking Garage.



Parking and Entrance Directions:

CyberKnife patients should park within the Children's Hospital parking garage located at One Children's Place. The CyberKnife suite is located in the lobby of Children's Hospital, first floor.

The Future is Here!



CYBERKNIFE®

SETON Neurosciences at Brackenridge Hospital

Tumor Treatment Without Surgery
A Patient's Guide



A member of the SETON Healthcare Network

601 East 15th Street • Austin, TX 78701



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How Does the CyberKnife® Work?

The CyberKnife® combines two advanced technologies:

The first innovation is a lightweight radiation delivery system mounted on a multi-jointed robotic arm. This flexible robotic arm provides unparalleled access to previously unreachable tumors. Additionally, because of the incredible precision of the radiation beams, the CyberKnife® System is able to reduce harm to the critical structures surrounding the lesion. This increases safety and helps reduce side effects.

The second innovation is an image guidance system similar to those used for cruise missile guidance. This revolutionary advancement allows the CyberKnife® System to compensate for slight human movements during the treatment which allows radiation to be delivered without the use of a stereotactic frame.

What makes CyberKnife® Unique?

1. T4 Accuracy: The CyberKnife® System is the only radiosurgery treatment system available with T4 or Tight to the Tumor accuracy. CyberKnife® T4 radiosurgery is so precise, radiation beams can conform to small, complex-shaped tumors helping avoid healthy critical structures.

2. 100% Frameless: The combination of the image-guidance system and the multi-jointed robotic arm allows the system to compensate for patient movement, sparing patients from the pain and inconvenience associated with the conventional head frame that is fixed to the patient's skull.

3. Painless Surgery: The CyberKnife® System allows patients to be treated in a unique radiosurgery suite where painless "surgery" is performed with no incisions, no blood, no anesthesia and no recovery time.

4. Better Quality of Life, During & After Treatment: The simple outpatient CyberKnife® Procedure allows patients to undergo their treatment and immediately resume normal activities.

Is the CyberKnife® clinically proven?

The CyberKnife® System utilizes radiation technology that has been proven for over 30 years. Additionally, over 10,000 patients have received CyberKnife® treatments worldwide.

Is the CyberKnife® cleared by the FDA?

The CyberKnife® System received clearance from the FDA in July 1999 for the treatment of head and neck tumors. In October 2001, the FDA extended its clearance to include the treatment of tumors and other conditions anywhere in the body.

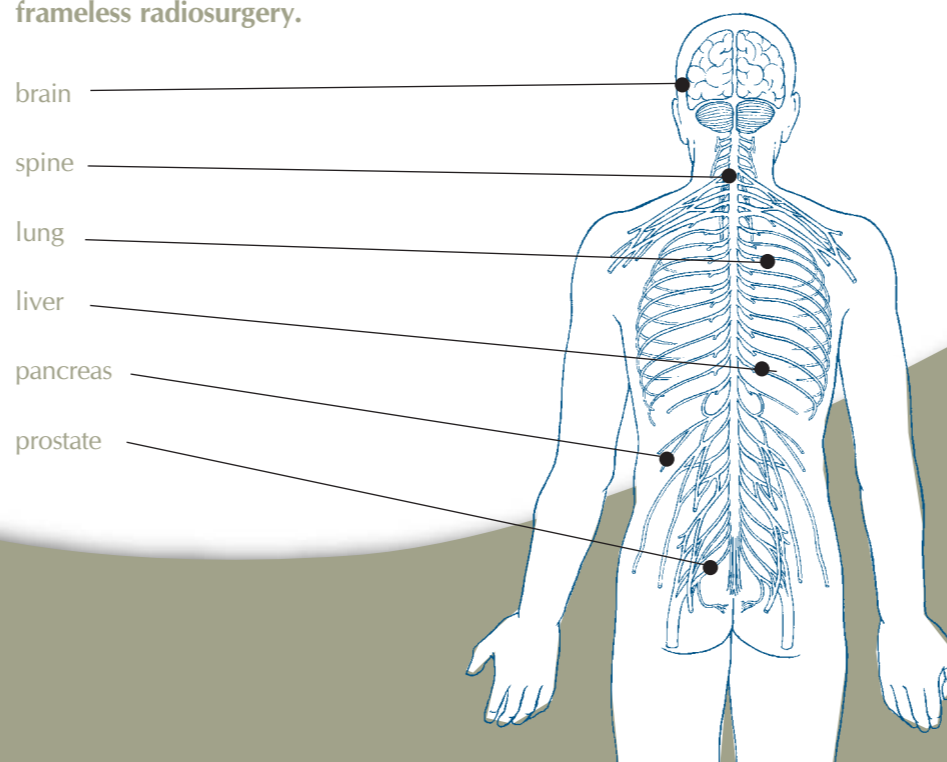
What types of tumors can be treated?

The CyberKnife® System is cleared by the FDA for Full-Body Radiosurgery. Consult with your physician to see if the CyberKnife® Treatment is right for you.

Who will be involved during my treatment?

The CyberKnife® System utilizes a team approach in which medical experts collaborate with the patient as their central focus. Team members will include your surgeon, radiation oncologist, medical oncologist, physicist and other team members within the hospital.

CyberKnife® technology allows for full-body, frameless radiosurgery.



Simple Outpatient Treatment Process

Step 1: Prep

Fiducial Placement - If you are undergoing CyberKnife® treatment for a spinal or body (non-head) lesion, you may require a short outpatient procedure to implant several small metal markers (fiducials) near the tumor to enable the CyberKnife® System to track position throughout treatment. Lesions in the head do not require this step.

Making a Mask or Body Mold - A mask (brain tumor) or body mold is made. The mold is used to help minimize movement during the treatment. The process is simple and painless.

CT Scan - A CT scan is taken. The surgeon and radiation oncologist will use the scan to identify the exact size, shape and location of the tumor along with the surrounding vital structures to be avoided.

Step 2: Treatment Planning (Done by CyberKnife® Team after you leave)

Once the anatomy has been defined, physicians will use the CyberKnife® System's state-of-the-art software to determine the number, intensity and direction of the radiation beams the robot will send to the target. This will help ensure a sufficient dose is administered to the tumor in order to destroy it while avoiding the adjacent normal tissue.

Step 3: The Treatment

Arriving - Bring any x-rays you may have. Wear comfortable clothing and no jewelry. Bring a bottle of water, a book and a CD to listen to during your treatment.

Positioning - During the CyberKnife® Procedure, you will need to lie still. Generally, no sedation or anesthesia is used, because the treatment is painless.

Painless Treatment, Verification & Targeting - The treatment itself involves the administration of radiation beams delivered from different directions. Prior to the delivery of each radiation beam, the image guidance system takes x-ray images and compares them to the original CT scan. This information is used to ensure the radiation is targeted directly at the tumor while avoiding critical structures.

Completion - Patients usually leave the hospital and resume normal activity immediately following the treatment.

Follow-Up - Follow-up imaging is generally performed to monitor the tumor's progress. While waiting for your results, stay busy and keep a positive mental state of mind.