Proton Therapy for Childhood Cancer

Any cancer diagnosis is difficult, but it's particularly hard for younger patients and their families. Survival rates are climbing, however, thanks to treatment advances like proton therapy. Its precise nature delivers highly targeted dosages of radiation directly to tumors, working to eliminate cancerous cells while sparing damage to healthy, growing tissue, and vital organs.

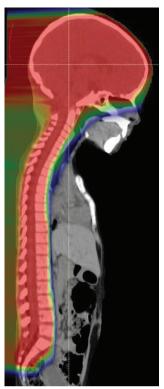
How Proton Therapy Works

During treatment, a narrow proton beam is guided to focus the highest energy of the beam at the location of the tumor. While the proton beam is being delivered, it can also:

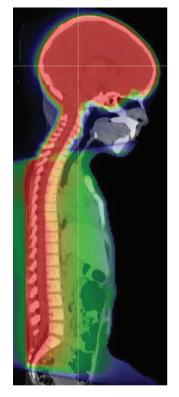
- Be designed to conform to the shape, size and depth of tumors
- Limit excess radiation near surrounding areas of the body

Precise Radiation Targeting

Once the proton beam enters the body at the targeted tumor, less radiation is administered. To help protect nearby tissue, little to no radiation is delivered after the proton beam hits the tumor.



Proton Therapy



Conventional X-Ray Therapy

Red: High Radiation Dose **Green:** Intermediate Radiation Dose

Blue: Low Radiation Dose

Proton Therapy Candidates

Every child has different needs and many factors are considered to determine the best treatment option, including the cancer type, stage of cancer, previous cancer treatments, and medical history.

More Benefits of Proton Therapy

- Non-invasive and may reduce side effects
- Fewer side effects allow young patients to maintain their quality of life during treatment and as they age
- May reduce recurrence rates
- May treat areas near previously irradiated tissues
- Less radiation to the heart and lungs

Refer a Patient Today

To refer a patient to Texas Center for Proton Therapy, fax the applicable referral form and the patient's medical records to the patient intake team at 469-420-9619 or visit www.TexasCenterForProtonTherapy.com and click the "Request an Appointment" button in the upper right-hand corner of the home page. If you need further assistance or have questions, please call Texas Center for Proton Therapy at 469-513-5500.



Texas Center for Proton Therapy

Texas Center for Proton Therapy provides an advanced lifesaving cancer treatment to North Texas – bringing more hope to cancer patients.

Leading Edge Technology

Texas Center for Proton Therapy offers some of the most advanced treatments available with next-generation proton and imaging technology.

- Pencil-beam scanning, combined with 4D treatment planning, allows for adaptation to complex-shaped tumors, improves dose conformity and reduces excess radiation to normal tissues.
- Cone-beam computed tomography (cone-beam CT) provides 3D volumetric imaging, which delivers improved anatomic visualization, better patient positioning and more precise targeting of cancerous tumors.
- **PET/CT** is a powerful imaging tool used to diagnose, stage or restage cancer, as well as evaluate the effectiveness of treatment.
- 3-Tesla MRI is double the strength of the clinical-setting standard and provides extremely clear and vivid images that can often be performed faster, decreasing overall scan time. The larger bore opening also has a more spacious feel and can accommodate larger patients.

Clinical Expertise

From nurses to radiation oncologists, the entire center is staffed with young patients in mind. Our physicians specialize in pediatric oncology and understand that any kind of medical treatment can be new, unknown, or even worrisome for children diagnosed with cancer. The pediatric subspecialists at Texas Center for Proton Therapy use protocols developed for children and specialized pediatric equipment. The Center also offers clinical trials specifically for children.



469-513-5500



Pediatric Cancers Treated by Proton Therapy

- Brain and spine tumors
- Chordoma
- Craniopharyngioma
- Ependymoma
- Ewing Sarcoma
- Germinoma & other germ cell tumors

- Hodgkin Lymphoma
- Medulloblastoma
- Neuroblastoma
- Rhabdomyosarcoma
- Sarcomas
- Other pediatric cancers/tumors

Patient-Centered Approach

Texas Center for Proton Therapy has a patient support services team dedicated to making patients' lives easier so they can focus on their care and recovery. Patient support services include:

- Focused therapeutic activities for patients, families, and caregivers
- Child life specialist (child development expert) made available
- Child play area
- Assistance with logistics of care and travel
- On-site tours and patient orientations

Sources: American Cancer Society, American Society of Clinical Oncology, National Cancer Institute, and Texas Cancer Registry.

