

# Proton Therapy for Brain & Spinal Tumors

In many cases, treating brain tumors requires extremely precise technology. Proton therapy can be used to treat certain brain tumors by delivering high doses of radiation to tumors with accuracy. While the treatment works to eliminate cancerous cells, it also minimizes exposure to non-targeted, healthy tissue surrounding the brain. As a result, patients get the benefit of extremely precise tumor targeting with a lower risk for potential side effects.

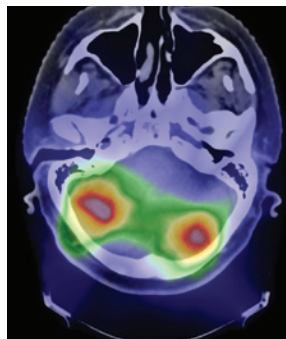
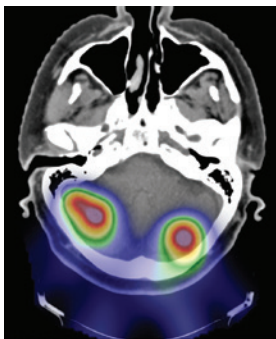
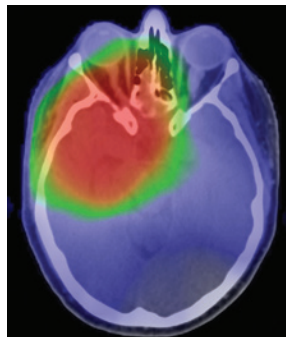
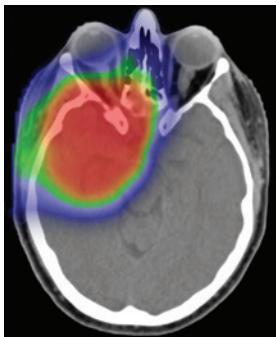
## How Proton Therapy Works

During treatment, a narrow proton beam is guided to focus the highest energy of the beam at the location of the tumor in the brain. 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 brain tumor, less radiation is administered. Then, after the proton beam hits the tumor, little to no radiation is delivered to help protect nearby tissue.



*Proton Therapy*

*Conventional X-Ray Therapy*

**Red:** High Radiation Dose

**Green:** Intermediate Radiation Dose

**Blue:** Low Radiation Dose

## Proton Therapy Candidates

Proton therapy most often treats tumors in sensitive areas where conventional therapy may not be the best option. The accuracy of proton therapy makes it particularly useful in treating:

- Patients with benign tumors
- Tumors near sensitive areas of the brain
- Patients who require postoperative radiation therapy
- Patients who have recurrent brain tumors following treatment
- Select patients, including those with brain metastases, who may be candidates for stereotactic proton therapy

## More Benefits of Proton Therapy

- Non-invasive and may reduce side effects
- May reduce recurrence rates
- May have less effect on quality of life during and after treatment
- May treat areas near previously irradiated volumes
- Potentially faster recovery time after treatment

## 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. Referrals can also be made online at [TexasCenterforProtonTherapy.com](http://TexasCenterforProtonTherapy.com) by clicking 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.



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