

Proton Therapy for Children with Cancer

Talk to your child's doctor about how proton therapy can help.

pediatric

Precision Therapy. Fewer side effects.

Proton therapy is an advanced form of radiation cancer treatment that precisely targets tumors. Because this precision causes less damage to healthy tissue, proton therapy patients experience fewer side effects than with standard X-ray radiation. Proton therapy is effective in treating a broad range of tumors including prostate, brain, head and neck, central nervous system, lung, sarcoma, gastrointestinal and many pediatric cancers.

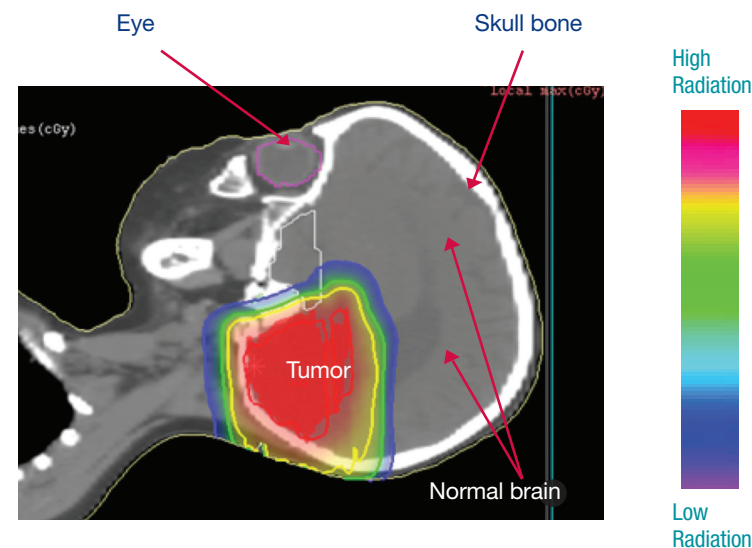
Particularly effective and *beneficial* for children.

Since children's bodies are still growing, children are more sensitive to damage to healthy tissue caused by radiation. They can experience more serious short-term and long-term side effects from x-ray radiation than adults. Studies that have been done on the use of protons for pediatric tumors show excellent results in controlling tumors, reducing damage to healthy tissue and lowering the risk of secondary tumors later in life.^{1,2,3}

Brain tumor treatment with protons.

With proton therapy, much of the healthy tissue and critical organs surrounding the tumor are spared from receiving additional radiation. Some of the child's normal brain tissue receives 50% less radiation than with X-rays/IMRT.

Grey/white area indicates no radiation exposure.



Tumors most appropriate for proton therapy include:

- Brain tumors such as medulloblastoma, craniopharyngioma, gliomas and ependyomas
- Connective and other soft tissue tumors (rhabdomyosarcoma)
- Eye tumors (i.e. retinoblastoma)
- Thyroid gland tumors
- Other endocrine glands and related structures
- Tumors on the spine or spinal cord

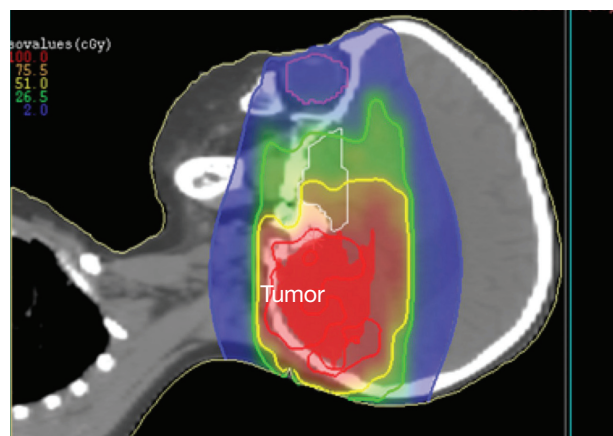
Research has shown that proton therapy can significantly reduce the risk of developmental growth delays and , secondary tumors, reductions in IQ and other complications often associated with standard X-ray radiation.

1. MacDonald SM, DeLaney TF, Loeffler JS. Proton Beam Radiation Therapy. Cancer Investigation.2006;(24):199-208.
2. Miralbell R, Lomax A, Cella I, Schneider U. Potential reduction of the incidence of radiation-induced second cancers by using proton beams in the treatment of pediatric tumors. Int. J. Radiat. Oncol. Biol. Phys. 2002;54(3):824-829.
3. Metz J. Reduced normal tissue toxicity with proton therapy. OncoLink 6.29.2006.

Brain tumor treatment with X-rays/IMRT.

With X-rays/IMRT, much of the healthy tissue and critical organs surrounding the tumor, including the eye and normal brain tissue, receives radiation.

Colored area indicates radiation exposure.



Call a ProCure center for more information.

ProCure Proton Therapy Center in Oklahoma City 866-204-9863

CDH Proton Center, A ProCure Center in suburban Chicago 630-393-7030

Source of treatment plans:

ProCure Training and Development Center.

ProCure
Proton Therapy Center

Be prepared when talking to a doctor about your child's treatment options, including proton therapy.

The first step in your child's treatment plan is to discuss your options, including proton therapy, with your child's doctor. Your child's doctor may not be as familiar with proton therapy as other treatment options so **bring this sheet with you.**

Below are a few questions to help you discuss proton therapy with your child's doctor:

- Is proton therapy an option for my child? What are the pros and cons?

- How does proton therapy compare with my child's other options?

- What short-term and long-term side effects or complications can I expect with each treatment option?

- How long would my child's treatment last—at each appointment and the entire course?

- Where do I take my child to receive proton therapy?

- Once we have decided a course of treatment, what are the next steps?

Frequently asked questions:

Can proton therapy be used in conjunction with other forms of cancer treatment?

Yes. Depending on the diagnosis, proton therapy may be used in combination with conventional radiation, chemotherapy, hormone therapy and/or as a follow-up to surgery.

Is proton therapy covered by most insurance plans?

Proton therapy is covered by most insurance providers nationwide and the U.S. Medicare program. The financial counselors at ProCure will work with you and your insurance provider to get you all the coverage information you may need.

What will my child feel like during the course of proton therapy?

There is no discomfort or sensation during the actual radiation treatment. Most pediatric patients have few, or very mild, side effects from proton therapy. If your child experiences any side effects they can be managed with medications, if necessary.

Proton therapy is a precise, effective option with fewer side effects than traditional radiation therapy.

To learn more about the benefits of proton therapy or to request a consultation, call our centers at:

ProCure Proton Therapy Center in Oklahoma City

866-204-9863

CDH Proton Center, A ProCure Center in suburban Chicago

630-393-7030