

Proton Therapy for Patients with Cancer

Talk to your doctor about how proton therapy can help.

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.

Effective in treating a broad range of tumors.

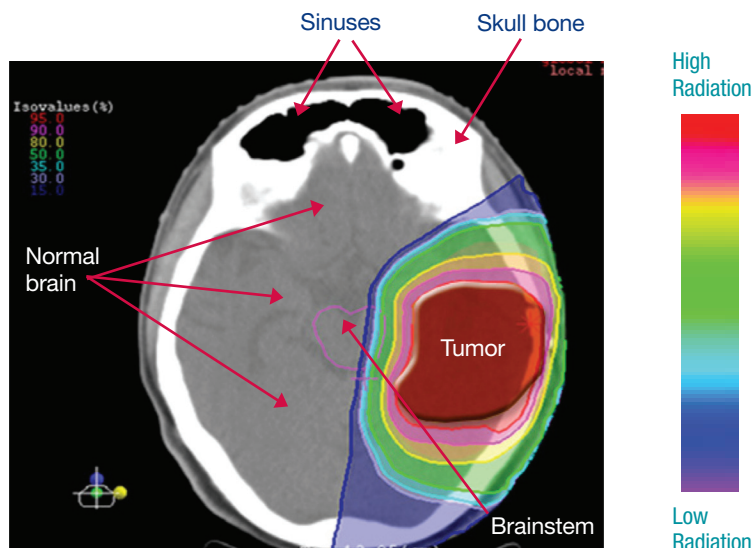
Although tumors can be treated with surgery, chemotherapy and standard X-ray radiation, proton therapy can be particularly beneficial for patients with certain types of cancer as well as some non-cancerous tumors and arteriovenous malformations. The ability of protons to deposit more energy directly in the tumor makes proton therapy an ideal treatment option for many patients, especially those whose tumors are near critical organs or structures.

The most important benefit of proton therapy is that protons result in less damage to healthy tissue compared to other forms of radiation treatment so patients experience fewer side effects.

Brain tumor treatment with protons.

Proton therapy spares much of the healthy tissue and critical organs surrounding the tumor from receiving additional radiation. Some of the 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:

- Prostate cancer
- Brain tumors
- Pediatric tumors
- Head and neck tumors
- Base-of-skull tumors
- Tumors near the spine
- Lung tumors
- Gastrointestinal cancers, including anal, rectal, colon, esophageal and pancreatic
- Arteriovenous malformations (AVMs)
- Melanoma of the eye
- Pituitary gland tumors

Particularly beneficial for children.

Since children's bodies are still growing, they can experience more serious short-term and long-term side effects from X-ray radiation than adults.^{1,2} Research has shown that proton therapy can significantly reduce the risk of developmental and growth delays, secondary tumors, reductions in IQ and other complications often associated with standard X-ray radiation. This is why proton therapy is often preferred when children need radiation treatment for cancer or other types of tumors.

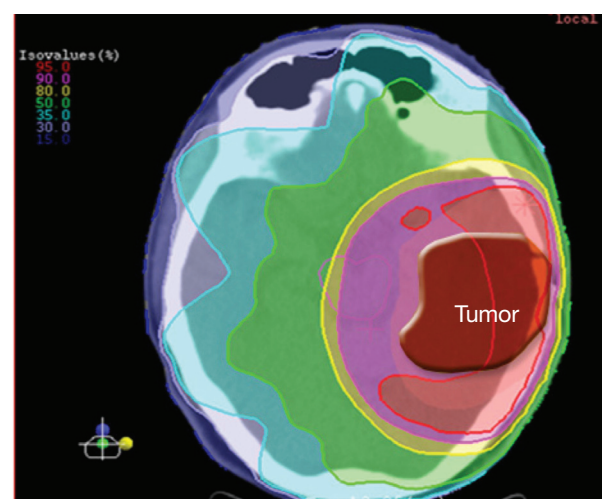
¹ MacDonald SM, DeLaney TF, Loeffler JS. Proton Beam Radiation Therapy. Cancer Investigation.2006;(24):199-208.

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.

Brain tumor treatment with X-rays/IMRT.

With X-rays/IMRT, much of the healthy tissue and critical organs surrounding the tumor receives radiation. The extra dose to healthy tissue from X-ray radiation therapy is equivalent to exposing the brain to 75,000 - 450,000 dental X-rays.

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 your doctor about your treatment options, including proton therapy.

The first step in your treatment plan is to discuss your options, including proton therapy, with your doctor to determine the best treatment for you. Your doctor may not be as familiar with proton therapy as other treatment options so **be sure to bring this sheet with you.**

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

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

- How does proton therapy compare with my other options?

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

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

- Where do I go to receive proton therapy?

- Once I 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.

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

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 I feel like during the course of my proton therapy? What are the side effects?

There is no discomfort or sensation during the actual radiation treatment. Most patients have few, or very mild, side effects, such as fatigue, from proton therapy. If you do experience any side effects they can be managed with medications, if necessary.