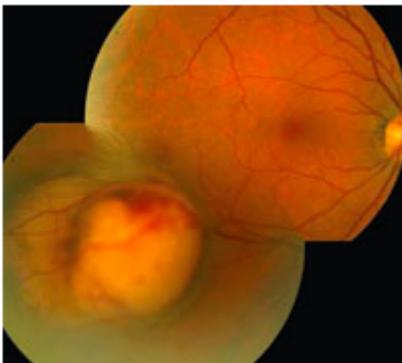


Published on *UCSF Department of Radiation Oncology* (<https://radonc.ucsf.edu>)

[Home](#) > [Patient Care](#) > [For Patients](#) > [Conditions We Treat](#) > [Ocular Tumors](#)

Ocular Tumors

Ocular tumors including melanomas of the eye, choroidal hemangiomas, conjunctival tumors, benign eye disease, and other eye tumors are treated at UCSF. Proton therapy [1] is used in a majority of cases, particularly for ocular melanomas. External beam radiation, intensity modulated radiation, stereotactic radiosurgery, and stereotactic radiation therapy may also be used.



Ocular tumor visible in photograph of a retina

For more information on appropriate alternatives for eye tumor treatments or to schedule an appointment, please contact us by phone at (415) 353-9895 or by email at OcularRadOncNP@ucsf.edu [2]

Ocular Melanoma (Melanomas of the Eye)

Overview:

Ocular melanoma is the most common primary adult tumor of the eye. Though it is a rare disease, UCSF's dedicated Ocular Melanoma Proton Therapy Program [1] has successfully treated and followed thousands of eye patients since 1978. Proton therapy (charged subatomic particles) is considered the "gold standard of care" for treatment of ocular

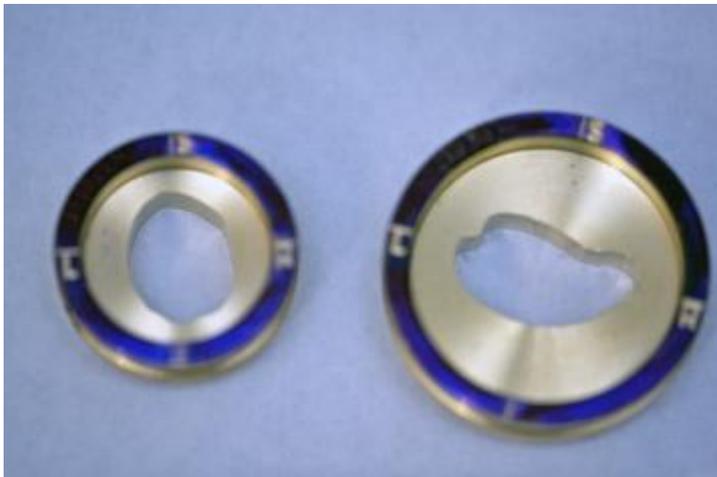
melanoma.

?Ocular melanoma,? ?uveal melanoma,? or ?choroidal melanoma? are often used interchangeably. The terms describe melanomas, which arise from the eye, and can occur in the iris, ciliary body and/or choroidal regions of the eye. Melanomas are cancers that arise from specific types of pigmented (colored) cells in the body. Melanomas of the eye are rare.

There are three main areas in the eye where melanomas arise:

- the iris
- the ciliary body
- the choroid

Together, these three regions of the eye are called the ?uvea.? The choroid is the layer in which most eye melanomas arise. The choroid sits between the retina (nerve layer that is light sensitive in the back of the eye) and the sclera (white outer layer of the eye).



Examples of special collimators for the shaping of proton beams based on the unique shapes of patients' tumors

Risk factors for developing ocular melanoma can include being of Caucasian ethnicity, having light-colored eyes, having engaged in welding, having a history of sun burn or snow burn, and being of older age.

Diagnosis:

Patients can present with symptoms such as visual field loss, visual blurriness, flashing lights, floaters, pressure changes, or other eye changes. Some patients may not experience any symptoms or the tumor may be found on a routine eye exam.

If a patient is noted to have symptoms and/or found to have suspicious findings on exam, he/she should be seen by an ophthalmologist or retinal specialist for further study. This may include, dilated clinical exam, ultrasound, fundus photography, imaging studies, and other analysis.

Treatment:

Proton therapy, which is a kind of particle radiation therapy, is considered the ?gold standard of care? for ocular melanomas, the most common primary malignant adult cancer of the eye,

as well as for other ocular tumors. UCSF is one of only two long-standing major proton ocular centers in the United States with a dedicated program and beam-line for such rare diseases of the eye. Patients often travel from outside of California or from outside of the USA to receive care at UCSF.

UCSF Radiation Oncology is part of the UCSF Comprehensive Cancer Center, a member of the National Comprehensive Cancer Network; an alliance of 26 of the world's leading cancer centers. The UCSF Ocular Melanoma Proton Radiation Program [1] is one of a very select group of programs across the nation and world, that offer proton therapy for uveal melanoma and that have long-term clinical and technical expertise in treating this cancer.



Meaningful clinical, radiation planning, and treatment delivery research and development for proton/particle therapy for cancer has been pioneered and implemented at UCSF. An example of the significant long term benefits in terms of ocular tumor control as well as preserving the eye with particle therapy was the subject of a recent article published by Director of the Ocular Tumor Proton Therapy Program, Kavita K. Mishra, MD, MPH in the International Journal of Radiation Oncology, Biology, Physics: Long-term Results of the UCSF-LBNL Randomized Trial: Charged Particle With Helium Ion Versus Iodine-125 Plaque Therapy for Choroidal and Ciliary Body Melanoma [3]

Contact

For more information on appropriate alternatives for melanomas or other malignant or benign eye tumor treatments or to schedule an appointment, please contact us by phone at (415) 353-9895 or by email at OcularRadOncNP@ucsf.edu [2]

*/

UCSF Main Site

© 2015 The Regents of the University of California

Source URL: <https://radonc.ucsf.edu/ocular-tumors>

Links

[1] <https://radonc.ucsf.edu/proton-therapy-ocular-tumors>

[2] <mailto:OcularRadOncNP@ucsf.edu>

[3] [http://www.redjournal.org/article/S0360-3016\(15\)00121-2/abstract](http://www.redjournal.org/article/S0360-3016(15)00121-2/abstract)