

Transpupillary Thermotherapy

This material will help you understand your transpupillary thermotherapy (TTT) laser treatment and what you can expect.

What is transpupillary thermotherapy?

Transpupillary thermotherapy (TTT) is used to treat certain tumors inside the eye. The treatment works by slowly raising the temperature of the tumor. A laser is used to deliver the low level heat to the area. Raising the temperature of the tumor kills the cancer cells and shrinks the tumor. The gradual increase in temperature also helps to limit the damage done to other layers of the eye.

TTT is often used to treat small retinal and choroidal tumors. It can be used on its own or in combination with radioplaque therapy. The choroid is the layer of the eye between the retina and the sclera (the white part of the eye). The picture on the right shows these parts

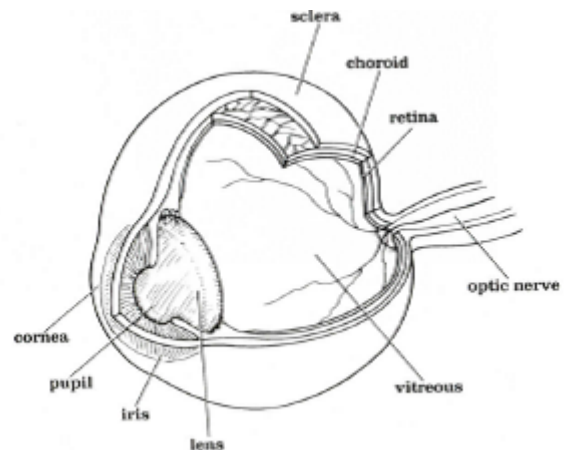


Image courtesy of the Collaborative Ocular Melanoma Study Group

What do I need to know before my procedure?

There are no special preparations for TTT. You should eat normally and take all your regular medicines before you come to the clinic.

The procedure is performed as an outpatient surgery or in your doctor's office, so you will be able to go home the same day. Be sure to arrange for a responsible adult to come with you, stay during procedure, and take you home. Your eyes will be blurry after so you should not drive that day.

What can I expect on the day of my procedure?

On the day of your TTT procedure, you will come to the Kellogg Eye Center Ocular Oncology Clinic. A technician will first take a few measurements of your eyes. S/he will then give you eye drops to dilate (widen) your pupils. Then you will be given local anesthesia to numb your eye.

Once your eye is numb, your eye doctor will shine the laser into your eye for one minute intervals. The laser will go through your dilated pupil to reach the tumor at the back of the eye. You may have some discomfort while this is going on, but it should not hurt too much. The entire procedure usually takes 10-20 minutes to complete.

What can I expect after my procedure?

Your vision will be blurry and you may see small spots after the TTT procedure. This should clear up within a few days.

To ensure the best recovery, carefully follow any instructions your doctor gives you and keep all of your follow-up appointments. You will see your eye doctor about one month later.

Are there any complications related to transpupillary thermotherapy?

As with most procedures, there is a chance of complication. Your doctor will discuss many of these with you when you consent to treatment. The laser may

damage healthy eye tissue, which could affect your vision. There is also a chance that the tumor may grow back, as some cancer cells can survive the TTT.

Call your eye doctor right away if you have any of these symptoms (or any others that worry you):

- Increased pain not helped by Tylenol® (Acetaminophen)
- Change in vision
- Any redness or swelling around the eye gets worse

If you call the clinic after clinic hours, you will be told how to get in touch with the eye doctor on call. There is an eye doctor on call every day of the year.

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