Uveal Melanoma

What is uveal melanoma?

Uveal melanoma is a rare cancer that develops within an area of the eye called the uvea. Although rare, it is the most common type of eye cancer inside the eye in adults. The uvea contains cells known as melanocytes. These cells produce pigment inside the eye. When these cells turn cancerous, it can cause a mass to grow inside the eye. This mass is called Uveal melanoma.

Uveal melanoma can start in any of the three parts of the uvea (Figure 1):

- the iris – colored part of the eye,
- ciliary body – lies behind the iris, or
- the choroid – lies between the retina and sclera.
Once a diagnosis is made, the disease can be called iris melanoma (Figure 2), ciliary body melanoma or choroidal melanoma (Figure 3).

**What are the risk factors?**

Risk factors include having light skin color, blue eyes and blonde hair. It affects both men and women equally. Although it occurs most often in adults age 50 and older, it can occur in young adults.

**What are the signs and symptoms?**

Common symptoms include blurry vision or seeing flashes of light or shadows. Some people do not notice any changes in their vision but are diagnosed during a routine eye exam.

**How do doctors diagnose it?**

Uveal melanoma can be noted on a routine eye exam. It is important to have an annual eye exam that includes dilating the eyes. Two types of exams detect uveal melanoma:

1. Slit lamp exam: This test gives your doctor a 3-D view of the eye.
2. Ophthalmoscopy: Using a special instrument called an ophthalmoscope, the doctor enlarges the eye and examines the inside of the eye with a small magnifying lens and light.

More tests may be done to give the exact diagnosis of the tumor. These are:
- Eye ultrasound: Sound waves create a picture of the eye (Figure 4).

Figure 2. Iris melanoma

Figure 3. Choroidal melanoma

Figure 4. Large choroidal melanoma shown on ultrasound.
• Eye photographs: These pictures are of the inside of the eye.
• Eye angiogram: A dye is injected into a vein in the arm. Then pictures are taken as the dye circulates in the blood vessels inside the eye.
• Computerized tomography (CT) scan: This scan creates a picture of the inside of the body using X-rays.
• Magnetic resonance imaging (MRI): This is similar to a CT scan, but it uses magnetic fields and sound waves to create a detailed picture of the inside of the body.
• Blood tests: Blood is drawn and sent to the lab to check liver enzymes.

Once you have been diagnosed, your doctor will discuss treatment options with you. Then you will decide how to proceed.

**What are the treatment options for uveal melanoma?**

Treatment options depend on:
• the tumor size,
• whether the tumor has spread,
• how much vision is affected, and
• your general health and age

Treatment options include:
• **Observation**: The doctor closely watches small lesions over months or years for growth.
• **Laser treatment (transpupillary thermotherapy or TTT)**: Laser is used to kill cancer cells that are on the tumor surface.
• **Plaque radiation therapy**: Radiation therapy is delivered to the tumor using a small gold or steel bowl called a plaque. (Please see more information on the next page.)
• **Enucleation**: Surgery is done to remove the eye. The eyebrow, eyelid, eyelashes, tear ducts and eye muscles are not affected. (Please see more information on the next page.)

**Can uveal melanoma spread to other parts of the body?**

Uveal melanoma can spread to the liver. It may also spread to the lungs. Your doctor will screen you often to see if the cancer has spread.

**Questions and Answers...**

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<thead>
<tr>
<th>About Plaque Radiation Therapy</th>
<th>About Enucleation</th>
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<tr>
<td><strong>What is plaque radiation therapy?</strong> Radiation seeds are placed on a small gold or steel bowl called a plaque. The plaque is then placed on the eyeball. After placement, you will stay in the hospital for three to five days while the seeds deliver a high dose of radiation.</td>
<td><strong>What is enucleation?</strong> Enucleation is surgery to remove the eye. All of the other eye structures, including the eyebrow, eyelid, eyelashes, tear ducts and eye muscles remain intact. After surgery, the inside of the eye socket will have a pink color. A</td>
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<td>to kill the tumor. Plaque radiation therapy involves two separate surgeries; one to place plaque and a second one to remove the plaque.</td>
<td>piece of plastic will be placed inside the socket to help keep the socket open until your artificial eye can be made and placed. This usually happens about four to six weeks after surgery.</td>
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<td><strong>How long is each surgery?</strong></td>
<td><strong>How long is the surgery?</strong></td>
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<td>The surgery to place the plaque may take more than an hour from start to finish. To remove the plaque, surgery may take less than an hour to complete.</td>
<td>This type of surgery takes about two hours.</td>
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<td><strong>Can I have visitors during my hospital stay?</strong></td>
<td><strong>Will I have to stay in the hospital?</strong></td>
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<td>Yes, you may have visitors, but pregnant women and children under the age of 12 are not allowed to visit. Also, one person may stay overnight with you while you are in the hospital.</td>
<td>You will stay at least one night. You will be discharged to go home once your doctor feels you are ready.</td>
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<td><strong>Can I bring personal items with me to the hospital?</strong></td>
<td><strong>Will the affected area be covered after surgery?</strong></td>
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<td>Yes, you may bring clothing, your cell phone and electronic devices, such as a laptop, mp3 player, e-book reader or tablet with you to the hospital.</td>
<td>Yes, you will have a large patch over the area where your eye was removed. This patch will stay on for one week or less. It is important to keep the patch clean and dry. Do not remove the patch until your doctor tells you to do so.</td>
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<td><strong>Will my eye be covered after surgery?</strong></td>
<td><strong>Will I be able to eat after my surgery?</strong></td>
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<td>Yes, you will have a patch over your eye for about 24 hours after surgery. When it is removed, you will be able to open your affected eye partly or completely.</td>
<td>After surgery, you may not feel like eating or drinking. However, it is important for you to drink fluids after your surgery. You will be encouraged to drink fluids as soon as you feel able to do so.</td>
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<td><strong>Do I need to use any drops to the eye while in the hospital?</strong></td>
<td><strong>Are there any special instructions I need to follow after my surgery?</strong></td>
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<td>Yes, once the patch is removed, we will begin the required eye drops to the affected eye to help relieve eye pain or discomfort.</td>
<td>It is important that you protect your other eye after surgery. Wear shatterproof, polycarbonate glasses while you are awake. Do not do any type of activities that may place your other eye at risk, such as sports.</td>
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<td><strong>Will I be able to walk or leave my room after the plaque is placed?</strong></td>
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<td>Yes, you are encouraged to walk as much as possible if you are able. You may leave your room to walk, but please wear properly fitted non-skid shoes and make sure your walking pathway is clear of obstacles. If you are at risk</td>
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<td>for falls, always ask for help. “Call, don’t fall.”</td>
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| **Will I be able to eat after surgery?**  
After surgery, you may not feel like eating or drinking. However, it is important for you to drink fluids after your surgery. You will be encouraged to drink fluids as soon as you feel able to do so. |  |

### How do I learn more?

Please talk to your health care team in the Ophthalmology Clinic at 713-792-6523 if you have any questions or see the following websites:

**The National Eye Institute**  

**The National Cancer Institute**  
[www.cancer.gov](http://www.cancer.gov)

**Ocular Melanoma Foundation**  
[www.ocularmelanoma.org](http://www.ocularmelanoma.org)

**National Comprehensive Cancer Network**  
[www.nccn.com](http://www.nccn.com)

**American Cancer Society**  
[www.cancer.org](http://www.cancer.org)