

What to Expect When Getting External Beam Radiation Therapy to the Eye

For patients having radiation therapy

Read this pamphlet to learn about:

- The main steps in planning radiation treatment
- How to manage common side effects
- What happens when you finish treatment
- Where to get more information

For more information on Radiation Therapy, please watch our [patient education videos](#). These videos offer a step-by-step guide to the radiation therapy treatment process. They also explain how radiation works in the body and how your team works together to deliver the highest quality treatments.



Your radiation oncologist, nurse, radiation therapists and other health care professionals will provide you and your family with care, support and information throughout your treatment.

Please ask any questions you have when you come each day. Your radiation therapists can try to answer your questions or let you know which members of your health care team can help.

You may also talk to your doctor or nurse at your weekly review appointment.

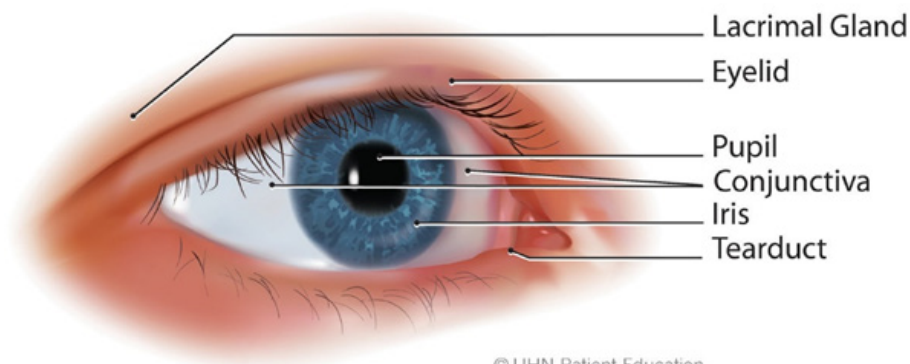


Interpretation is available if you speak very little or no English. Please let us know as soon as possible that you need help with interpretation.

Parts of the eye

The important structures related to the eye include:

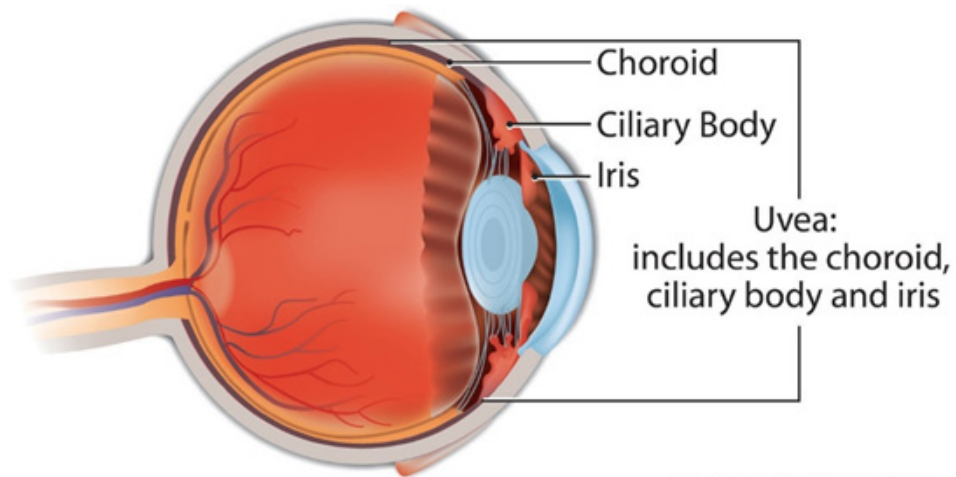
- **Lacrimal Gland:** found in the upper outer corner of the eyelid – responsible for occasional lubrication and tears
- **Eyelid:** made up of layers of skin, muscles, lashes, glands, tear ducts, and conjunctiva on the inside surface
- **Conjunctiva:** a pink membrane on the inside of the lids that folds back on itself to cover the visible part of the “white” of the eye (sclera).



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The important structures related to the wall of the eye include:

- **Sclera:** Outer coat
- **Uvea:** Made up of the Choroid, Ciliary body and Iris (see diagram)
- **Retina:** Sensitive inner lining of the eye



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What eye conditions are treated with external beam radiation therapy?

- Eyelid cancers
- Conjunctival cancers
- Graves' disease
- Metastases to the eye
- Orbital tumours
- Choroidal melanoma

Please read pages 9 and 10 for more information on these conditions.

Your radiation therapy planning

Please check in at the reception desk on level 1B. We will take your photograph to help us identify you during your treatment.

You can expect to be here for about 1 hour for this appointment.

What happens during my CT simulation appointment?

We will use a CT simulator to decide on the area of treatment. A CT simulator is a CT scanner with special computer software that gives us the detailed x-ray images we need to prepare your treatment.

A device that fits on your head to keep it still will be made at this appointment. This is called a mask. It will be used during your treatment course to help get you in the same position for every radiation treatment. The doctors, physicists and therapists will use the information they gather to develop a plan that is right for you.

Having your radiation therapy treatment

When will I know about my first treatment appointment?

You can expect a phone call at home a few days after your CT simulation appointment. We will give you the date and time of your first appointment.

Where do I go for my radiation treatment appointments?

Your radiation treatment will be at Princess Margaret Cancer Centre. Check in at the reception desk on level 2B when you arrive. Level 2B is 2 levels below the main floor. The staff there will show you how to check in.

Can I choose when I have my radiation therapy appointments?

Because we treat so many patients every day we cannot guarantee your exact appointment time. Your radiation therapists will try to help you if there are special circumstances.

What happens at the treatment appointment?

The Radiation Therapists will check the measurements from your CT simulation scan. They may take a Cone Beam CT scan (sometimes called a "mini CT") or x-ray images to check that you are in the same position. Once your position has been checked and any changes have been made, you will have your radiation treatment.

How long is the treatment?

You should plan to be at the hospital for 30 to 60 minutes each day of your course of treatment. Each treatment will take about 20 minutes. Most of this time is used to make sure you are in the right position for treatment.

Will I see the oncologist during my radiation treatments?

You will meet with your radiation oncologist and nurse once every week during your treatment. They will answer any questions or talk to you about any concerns that you may have. Tell them about any side effects you may be having.

What are the possible side effects of radiation treatment?

The side effects of your treatment depend on what part of the eye is being treated. Your radiation oncologist will talk to you about what side effects to expect for your situation. Most side effects don't last and will probably get better 4 to 8 weeks after your last treatment.

What changes to my skin can I expect?

Your skin in the treatment area may become red and dry and may flake or peel (like a sunburn). This is a normal reaction to treatment that will get better.

It usually happens 1 to 2 weeks after treatment begins. If your treatment is short, skin changes may not appear until all your treatments are finished. These changes usually get better a few weeks after treatment is done.

Do these things if your skin is red and irritated:

- Wash your hands with soap and water before and after skin care.
- Wash your face gently with warm water. Gently pat your skin dry.
- Gently apply an unscented moisturizing cream such as Lubriderm or Glaxal base moisturizer on the irritated area. Avoid getting it near or in your eye.
- Do not rub or scratch the area. Do not expose the area to direct sunlight. Wear sunglasses if you go outside.

Do these things if your skin is flaking, peeling, has blisters or open areas:

- Wash your hands with soap and water before and after skin care.
- Wash your face gently with warm water. Gently pat your skin dry.
- Apply saline solution (water with a little added salt) to an unscented makeup remover pad or similar small clean absorbent cloth and place on the affected area.
- Cover open areas with a dressing. Visit the Radiation Nursing Clinic for help with dressing and advice about skin care products.
- Your radiation oncologist may prescribe eye drops, ointments or pain medications to help.
- Do not rub or scratch the area.

Will I lose any eyelashes?

If part of your eyelid is treated you may lose the eyelashes in that area. Your eyelashes will grow back after your treatment although this may take several weeks or months. You do not need to do anything about this side effect. Speak to your radiation oncologist and nurse if you have any questions.

Will I have dryness in the treated eye (or eyes)?

Dryness of the eye can be a short-term or a lasting side effect from radiation treatment.

Do these things to care for a dry eye:

- Moisten your eye with eye drops (artificial tears) as needed.
- Your radiation oncologist may give you a referral to an ophthalmologist (eye specialist). Ask your doctor about this.

Will I have an irritated or weepy eye?

Some treatments may cause part of the conjunctiva to become red and irritated (inflamed). You may have extra mucus in the affected eye.

Do these things to care for an irritated or weepy eye:

- Gently clean the mucus from your eye with a cotton-tipped swab and warm water. Do this when you wake up and when needed.
- Moisten your eye with sterile eye drops (artificial tears) if it feels dry or scratchy. Ask your radiation oncologist and nurse about this. They may also suggest an eye ointment.

Will I get tired while on treatment?

Fatigue (feeling very tired) is not usually caused by radiation therapy to the eye. But, you may feel tired if you worry about the effects of treatment. Please talk about your concerns with your radiation oncologist and nurse.

Do these things if you are feeling tired:

- Pace yourself, especially with activities that make you feel tired.
- Ask for help with activities you do every day and that you cannot manage.
- Pick a relaxing activity (for example walking) or hobby that you are able to do every day.
- Keep a regular sleep routine at night and rest as you need to during the day.
- Keep up your food and liquid intake.

What are some specific side effects?

For Eyelid and Conjunctival cancers: Cancers on the skin or the conjunctiva

- You may have skin changes 1 to 2 weeks after treatment starts.
- You may have redness and irritation (inflammation) in the conjunctiva.
- This may also cause extra mucous in the affected eye.
- In 2 to 3 years, the lens in the treated eye may become cloudy. This is called a cataract. You may need surgery to replace the lens and restore your vision.

For Graves' disease: A condition in which the eye muscles become inflamed and thick – it is not cancer

- You may have redness and irritation (inflammation) in part or in the entire conjunctiva. This may also cause extra mucous in your eyes.

For Eye metastases: Deposits of cancer in the eye which came from other cancers (such as from the breast or lung)

- Side effects depend on exactly what areas are treated.

For Orbital tumours: Cancer of the tissues around the eye

- You should have little or no discomfort from the treatment.
- There can be scarring later on.

For Choroidal melanoma: Cancer from the uvea within the eye

- There are usually few or no side effects during treatment.
- The retina near the tumour may become scarred, which may affect vision later on.

Please talk with your radiation oncologist about the specific side effects for your treatment.

What happens when I finish treatment?

Near the end of your treatment, we will give you a booklet titled [Questions to Ask Before You Finish Your Radiation Treatment](#). At your final weekly review appointment you will be given a follow-up appointment to see the doctor a few weeks or months after your treatment is finished.

After treatment finishes, some of your side effects will carry on and may get worse before they start to get better. This is normal. Continue to follow your health care team's instructions until you feel better. Call the hospital once you are finished with your treatment, if you have any questions or concerns.

Need more information?

Please visit the **Princess Margaret Patient and Family Library** on the main floor, or call them at:

416 946 4501 extension 5383. You can also visit the Princess Margaret Cancer Centre website at <https://www.uhn.ca/OurHospitals/PrincessMargaret> for more information and resources about your treatment and also services at the cancer centre.



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