

# About Eye Cancer - A Quick Guide



## Contents

This is a brief summary of the information on 'About eye cancer' from CancerHelp UK. You will find more detailed information on the website.

In this information there are sections on

- About the eye
- Risks and causes of eye cancer
- Symptoms of eye cancer
- Screening for eye cancer
- Types of eye cancer
- Should I see an eye cancer specialist?
- What to ask your doctor

## About the eye

There are two main areas of the eye. The front of the eye is the area you can see. The back of the eye is the area behind. It is often called the eyeball.

### The eyeball

The outside of the eyeball is a fibrous white layer called the sclera. Inside this is a layer rich in blood. This is called the uvea, and is the site of many eye cancers. The third, innermost layer of the eyeball contains the retina. The retina is the nerve layer of the eye. The cells of the retina react to light. They send messages to the brain through

the optic nerve, making it possible for you to see.

The inside of the eyeball is filled with a clear, jelly like substance called vitreous humour.

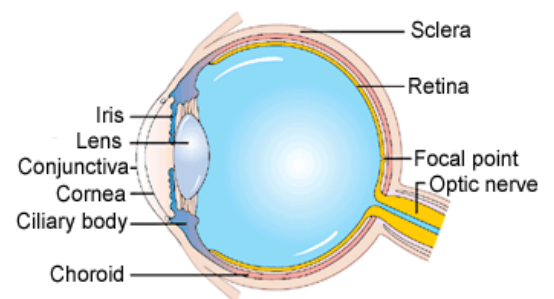


Diagram showing the different parts of the eye  
Copyright © CancerHelp UK

### The front of the eye

The coloured part of your eye is called the iris. In the middle of the iris is the pupil, which is the hole that lets light into your eye. Both are covered by a clear layer called the cornea.

### Around the eye

The tissue surrounding the eye is called the orbit. It is made up of muscles and nerves. The tear glands and the eyelid are called



adnexal structures. Cancers that develop in them are called adnexal cancers.

### Risks and causes of eye cancer

Eye cancer is very rare in the UK. We don't know exactly what causes it, but we do know about some of the things that increase people's risk of getting the different types of eye cancer.

Melanoma of the eye is more common in people with light eyes, people with a lot of moles, and possibly in people who have had too much exposure to sunlight.

Squamous cell carcinoma (SCC) of the eye is more common in people with a weakened immune system, including those with HIV. Sunlight exposure increases the risk of SCC in people with a weakened immune system. Infection with the human papilloma virus (HPV) is a likely cause. But HPV infection is very common and most people infected don't get eye cancer, so there are probably other factors involved.

Lymphoma of the eye is also more common in people with a weakened immune system.

Kaposi's sarcoma of the eye is much more common in people with HIV or AIDS.

About 4 out of 10 (40%) retinoblastomas are due to an inherited faulty gene. This means they run in families.

### Symptoms of eye cancer

People with eye cancer may have

- Bulging of one eye
- Complete or partial loss of sight
- Pain in or around the eye (rare with eye cancer)

- Blurred vision
- Change in the appearance of the eye

Eye cancer can also cause

- Seeing spots, flashes of light or wiggly lines in front of your eyes
- Blinkered vision (loss of peripheral vision) – you can see what is straight ahead, but not what is to the sides
- A dark spot on the coloured part of the eye (the iris) that is getting bigger

Pain is quite rare unless the cancer has spread to the outside of the eye.

### Screening for eye cancer

Screening means testing people for early signs of cancer before they have any symptoms. If no accurate screening test is available, it is not possible to screen for a cancer.

There is no national screening programme in the UK for eye cancer. These cancers are not common. And it would cost a lot of money to screen everyone for a disease only a few people get.

There are no specific tests available to screen for eye cancers. Opticians sometimes find eye melanomas when they are doing routine eye examinations. And The National Institute for Health and Clinical Excellence (NICE) referral guidelines for GPs recommend that children of a parent who has had retinoblastoma, or brothers or sisters of a child with retinoblastoma, should be checked soon after birth.

If you notice any changes in the way your eye looks or feels, see your GP.



## Types of eye cancer

Eye cancers are also called ocular cancers. Ocular is the medical term for the eye.

### Melanoma of the eye

Melanoma starting in the eyeball is the most common type of eye cancer in adults. Your specialist may call it uveal or choroidal melanoma. Doctors also group melanomas of the eyeball according to the way the cancerous cells look under a microscope. There are three types – spindle cell melanomas, non spindle cell melanomas, and a mix of both cell types.

### Lymphoma of the eye

Lymphomas usually begin in the lymph nodes. Very rarely lymphoma begins inside the eyes. This is called intraocular lymphoma. Intraocular lymphomas are always non Hodgkin's lymphoma.

### Eye cancers in children

Retinoblastoma nearly always occurs in children under the age of 5. Medulloepithelioma is a very rare type of eye tumour usually found in young children.

### Cancers around the eyeball

Cancers can develop in the tissues around the eye. They are cancers of muscle, nerve and skin tissue.

### Secondary eye cancers

Sometimes a cancer can spread to the eye from another part of the body. A cancer that has spread to the eye is called a secondary eye cancer.

## Should I see an eye cancer specialist?

It can be very difficult for GPs to decide who may have a suspected cancer and who may have something much more minor. With many symptoms, it is perfectly right that your GP should ask you to wait to see if they get better or respond to treatment, such as antibiotics.

### The NICE guidelines

The National Institute for Health and Clinical Excellence (NICE) has produced guidelines for GPs to help them decide who needs to see a specialist urgently. There are no specific guidelines for eye cancers apart from retinoblastoma. The guidelines for retinoblastoma mostly affect children aged under two.

### Guidelines for urgent referral

You should ideally get an appointment within 2 weeks for an urgent referral. The symptoms that need urgent referral to a specialist for possible retinoblastoma are

- If the pupil of the eye looks white instead of black. Sometimes this is noticed on photos when a flash is used
- A change in how well your child can see and your GP suspects it could be caused by cancer
- A new squint that your GP suspects could be caused by cancer
- Problems with sight in a child with a family history of retinoblastoma.

### If you are still worried

If you are concerned that your GP is not taking any symptoms as seriously as you think he or she should, you could take this information along to an appointment. Ask your GP to talk it through with you.



---

## What to ask your doctor about eye cancer

- Am I more likely to get eye cancer than other people?
- How will I know if I have eye cancer?
- Are there different types of eye cancer?
- Can I be screened for eye cancers?
- Do eye cancers run in the family?
- Is there anything I can do to reduce my risk of having eye cancers?

### More information

For more information about eye cancer, visit our website  
<http://cancerhelp.cancerresearchuk.org>

You will find a wide range of detailed, up to date information for people affected by cancer, including a clinical trials database that you can search for cancer trials in the UK. You can view or print the information in a larger size if you need to.

For answers to your questions about cancer call our Cancer Information Nurses on **0808 800 4040** 9am till 5pm Monday to Friday

---

Adapted from Cancer Research UK's Patient Information Website CancerHelp UK in January 2012. CancerHelp UK is not designed to provide medical advice or professional services and is intended to be for educational use only. The information provided through CancerHelp UK and our nurse team is not a substitute for professional care and should not be used for diagnosing or treating a health problem or disease. If you have, or suspect you may have, a health problem you should consult your doctor. © Cancer Research UK 2012. Cancer Research UK is a registered charity in England and Wales (1089464) and in Scotland (SC041666).