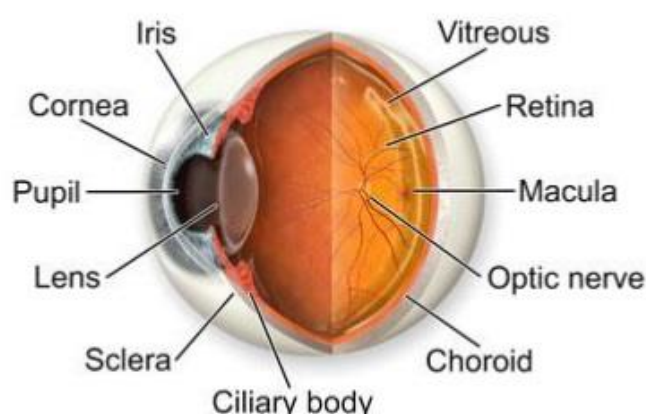


Uveal melanoma

What is uveal melanoma?

Uveal melanoma is a rare malignant (tumorous) cancer, affecting seven people in every million each year. It develops from cells called melanocytes, which are found in the uvea (the middle layer of tissue in the wall of the eyeball). The uveal tract is made up of the choroid, ciliary body and iris.

Normal Eye Anatomy



What is the cause of uveal melanoma?

There is no known cause of uveal melanoma and it is not related to sun exposure. However, uveal melanoma is more common in those who are fair skinned and have grey/blue eyes. The average age at which an ocular melanoma develops is 55-60 years old. If diagnosed in younger patients, there

may be an association with atypical benign moles or skin melanoma.

What are the symptoms of uveal melanoma?

For some people there may not be any symptoms and the tumour is found during a routine eye test. For others, it can cause visual disturbances such as flashing lights, blurred vision or a shadow in one eye.

How is the diagnosis made?

During your first visit to the ocular oncology clinic at Moorfields, we will carry out the following investigations:

- vision test and pupil dilation of both eyes using eye drops.
- clinical examination of the eyes.
- imaging of the lesion.
- ultrasound scan of the eye to determine the size and location of the lesion.

Sometimes it is also necessary to perform an intravenous angiogram – this involves an injection in the arm or back of the hand of one or two dyes (fluorescein and/or indocyanine green). Photographs are then taken at timed intervals to look at the blood flow of the



tumour. Your eye doctor will discuss the results of any investigations with you, confirm the diagnosis and discuss treatment options if you have been diagnosed with a melanoma.

It is also possible for uveal melanoma to spread to other parts of the body. The most common site of spread is to the liver. It is very unusual to find spread of cancer (metastatic disease) at diagnosis but this can happen in the future and so it is important to have regular checks of your liver after eye treatment. Your GP or medical practitioner can perform the necessary test. Metastatic melanoma is life threatening and if this should occur your treatment will be coordinated by medical oncologists. Many different treatments are available, including liver surgery, immune therapy, radiotherapy and chemotherapy.

What are the treatment options for uveal melanoma?

The appropriate treatment for uveal melanoma depends largely on the size and location of the melanoma, as explained below.

Ruthenium plaque brachytherapy

A ruthenium plaque is surgically placed on the surface of your eye to treat the tumour. The plaque is a curved metal disc, about the size of a ten pence coin, which contains radioactive material, called ruthenium, which is sealed within the disc and does not contaminate the rest of your body. The tumour receives a dose of radiation whilst the plaque is

on the surface of your eye, therefore you have to stay in hospital for observation (either at St Bartholomew's Hospital or Moorfields City Road). A second operation is needed to remove the plaque before you can go home. The length of stay in hospital may vary from a few days to a week. The results can vary depending on the size of the tumour, but for small to medium sized uveal melanomas (tumours) there is a high success rate. Larger tumours carry a greater risk of complications, which can damage vision.

Proton beam radiotherapy

Proton beam radiotherapy is a specialist treatment undertaken at the National Proton Beam Centre in Clatterbridge, near Liverpool. Protons are hydrogen ions that are accelerated to a high energy level, using a very strong magnet so that they are able to penetrate the eye and target the tumour to a specific, clearly defined depth and area. The treatment is performed over four daily outpatient visits to Clatterbridge, with accommodation provided. Before going to Clatterbridge, an eye operation is performed in London, which involves attaching small metal clips to the wall of your eye. These clips help the specialists locate the tumour in your eye. The clips are harmless and do not need to be removed. The results of this treatment can vary depending on the size of the tumour, but for medium sized uveal melanoma there is a high success rate. Larger tumours carry a greater risk of



complications, which can damage vision.

Photodynamic therapy

Photodynamic therapy involves the slow injection of a drug, called visudyne (verteporfin), through a vein in your arm. Once the injection has been performed, a low power laser is shone into the eye, focusing on the area being treated for just over a minute to activate the visudyne. Photodynamic therapy is reserved for only the smallest sized tumour (choroidal melanoma). The success rate is lower than conventional ruthenium plaque brachytherapy or proton beam radiotherapy. Visual complications are rare.

Enucleation (removal of the eye)

We usually only consider removal of the eye if:

- your tumour is too large to treat with ruthenium plaque brachytherapy or proton beam radiotherapy.
- your eye is already painful, due to high pressure inside the eye.
- the tumour is growing through the wall of the eye.

Exenteration (removal of the eye and surrounding tissue)

This is only considered if a large amount of tumour has grown through the wall of the eye and cannot be removed with an enucleation.

Local resection (surgical removal of the tumour)

Small melanomas near the front interior of the eye can occasionally be surgically removed under general anaesthetic. Additional ruthenium plaque brachytherapy is often recommended.

Iridectomy (surgical removal of iris melanoma)

Small melanomas on the iris (the coloured part of the eye) can occasionally be surgically removed under a general anaesthetic. Additional ruthenium plaque brachytherapy is often recommended.

Who decides what treatment I will need?

The treatment decision is an agreement between you and the consultant in charge, following a discussion on the advantages and disadvantages of each option above. The decision is also discussed at a multidisciplinary team meeting, when other senior members of the team and cancer specialist nurses will have an opportunity to contribute towards your treatment and care plan.

Please note

If you do require an operation this will be carried out at St Bartholomew's Hospital or Moorfields Eye Hospital. The medical and nursing team will explain where you will receive your treatment when they discuss your treatment plan with you.

Who can I speak to if I have any further questions?

If you have any problems or queries, Moorfields ocular oncology clinical nurse specialists are available to answer any questions and talk to you about your treatment. You can contact them on Tuesdays, Thursdays and Fridays, during office hours. If they are not available to take your call, please leave a message and they will call back when possible.

Advice and support available at Moorfields:

Moorfields ocular oncology clinical nurse specialists:

- Sinéad Hanrahan
Phone: 07711 765 371
- Nana Gyasi – Twum
Phone: 07885 447 138

Moorfields ocular oncology appointments:

- New appointments: 020 7521 4648
- Follow-up appointments: 020 7566 2347, option 3 for oncology

Moorfields ocular oncology secretaries:

- 020 7253 3411 ext. 4872 / 2267

Nurse counsellors

If you are finding it difficult to come to terms with your diagnosis and the treatment that you require, you may find it helpful to speak to one of our nurse counsellors based at Moorfields City Road. Counselling provides an

opportunity to talk things through, allowing you the time to explore your thoughts and feelings and to make sense of the way you feel. The counsellors are based in City Road and are able to offer confidential, face-to-face counselling to all adult patients over the age of 18yrs. The service is available Monday to Friday 9-5pm.

Contact details:

Email: moorfields.referralscounselling@nhs.net

Phone: 020 7566 2385.

You may need to leave a voicemail but please do not worry as this line is confidential. It is helpful to keep the message short and clear, including your contact details.

Your clinician can also refer you to the counselling service. If we are not able to help, we will be able to talk things through with you or point you in the direction of alternative support.

Eye clinic liaison officers (ECLOs) -

Eye clinic liaison officers (ECLOs) are available at Moorfields Eye Hospital in City Road to assist those living with sight loss. This includes patients, their relatives and carers. For more information about ECLO services at City Road, please ask a member of staff for an information leaflet, these are also available at the health hub, located at the main entrance of the hospital.

Phone: 020 7566 2355 or email:

moorfields.cityroadECLO@nhs.net





at Moorfields. The PALS team can also advise you on how to make a complaint.

Your right to treatment within 18 weeks

Under the NHS constitution, all patients have the right to begin consultant-led treatment within 18 weeks of being referred by their GP. Moorfields is committed to fulfilling this right, but if you feel that we have failed to do so, please contact our patient advice and liaison service (PALS) who will be able to advise you further (see above). For more information about your rights under the NHS constitution, visit www.nhs.uk/choiceinthenhs

