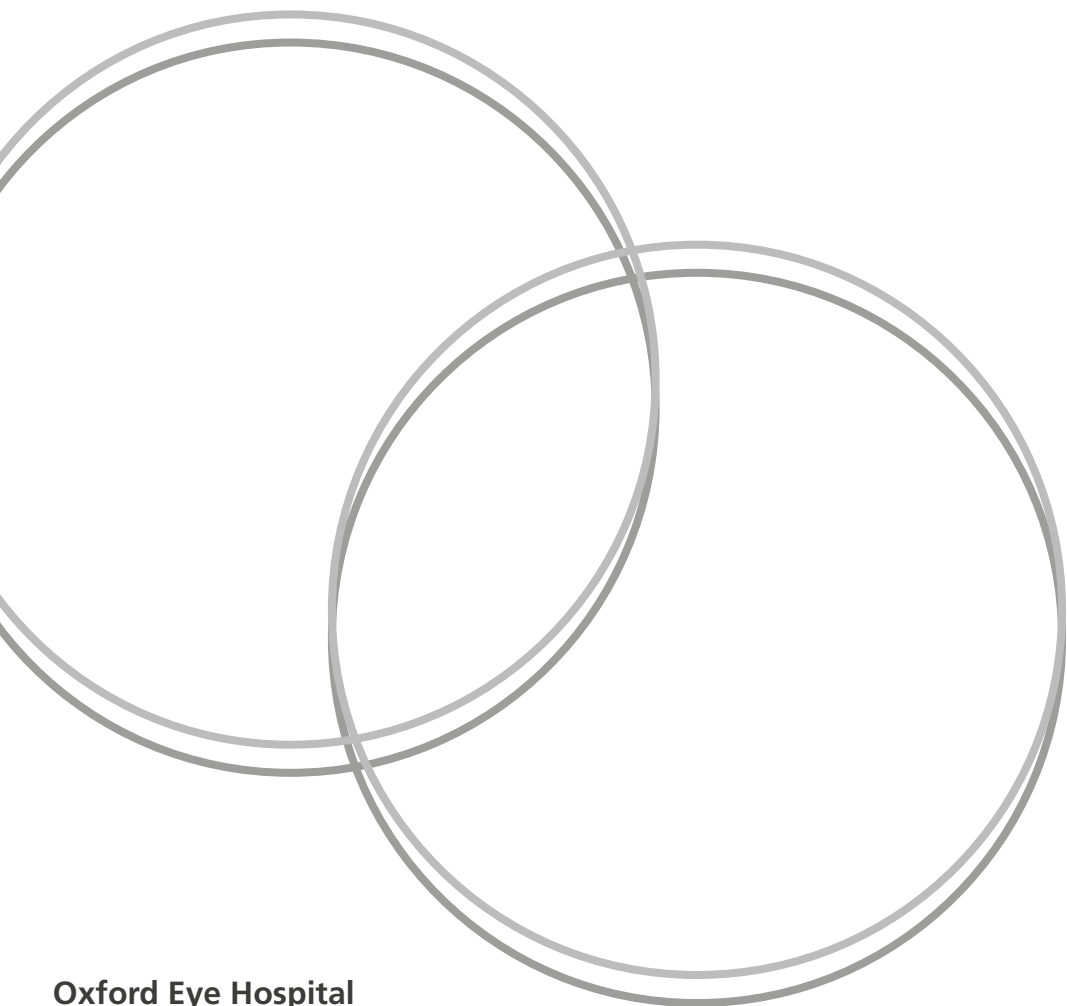


Central Serous Chorioretinopathy

Information for parents and carers



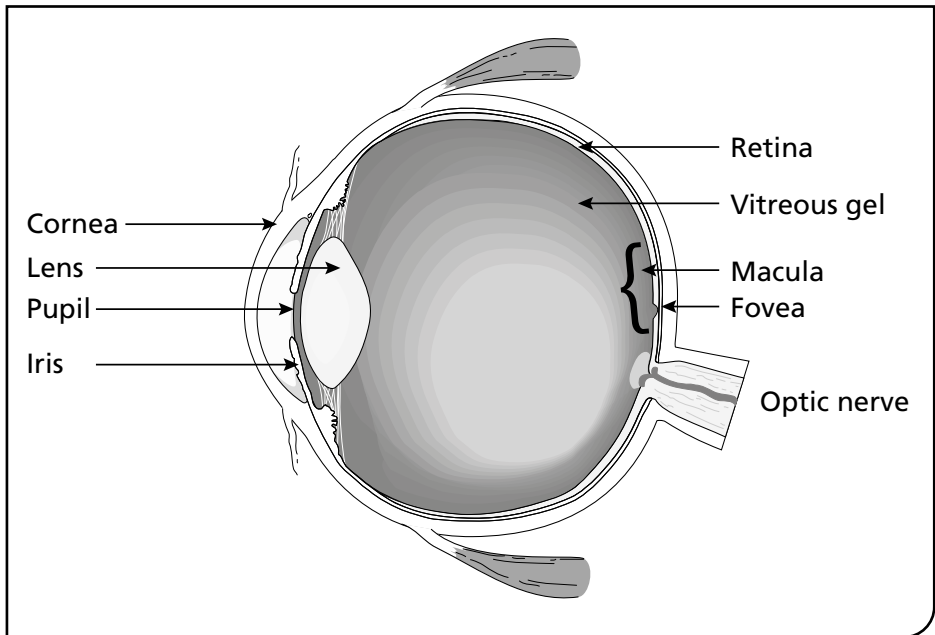
What is the retina and why is it important?

The retina is made up of delicate layers of cells lining the back of the eye, which capture images. These images are then relayed to the brain by the optic nerve as a 'message', allowing us to see.

The macula is the part of the retina responsible for your central vision (sight that's straight in front of you), which is particularly important for reading and detailed vision.

The rest of the retina is responsible for your peripheral vision (sight on the edge of your vision).

If you think of the eye like a camera, then the retina is like the film in the camera where those pictures are recorded.



What is central serous chorioretinopathy (CSC)?

This is a condition where fluid collects between the layers of the retina. It becomes noticeable when it starts to affect the macula.

When the fluid builds up, it can cause the top layer of the retina (which is made up of the cells that detect light) to become separated from the other layers. This is when you are likely to start to notice symptoms.

Symptoms of CSC can include:

- blurred vision
- distorted vision (straight lines no longer being straight)
- patches missing in your vision
- objects appearing a different size when comparing them with each eye
- colours appearing darker or different when comparing with each eye
- difficulty in seeing details clearly with your affected eye in low lighting conditions.

There are two main types of CSC. They tend to behave differently. The 'acute' type usually settles without treatment, but can recur.

In the 'chronic' type of CSC, the underlying nourishing layer of the retina tends to become damaged over time. This affects the rest of the retina, which then starts to affect vision.

CSC can affect both eyes, but sometimes affects one eye more than the other. Many people only notice symptoms in one eye.

It is more common in men aged 20-60, although it can occur in women and other age groups too.

Most people with CSC do not need any treatment, as the fluid should naturally re-absorb within 3-6 months. Your vision will then improve (usually back to how it was before having CSC). However, if you suffer from the chronic form, you may require treatment.

What causes CSC?

CSC can be caused by certain risk factors, but often no specific cause is found.

Previous studies have identified the following as being potential risk factors:

- steroid treatment in any form, such as tablets, inhalers, creams or joint injections
- high levels of stress
- conditions with high levels of cortisol (such as Cushing syndrome)
- smoking
- high blood pressure
- acid reflux (with a helicobacter pylori infection)
- pregnancy
- medicines for erectile dysfunction
- obstructive sleep apnoea.

Risk factors for CSC

Steroids

Steroids are frequently used to treat medical conditions. It may not be possible to stop taking them and they should not be stopped suddenly, without speaking with your GP or physician.

It is important that your physician and GP are aware you have CSC and that steroids should be avoided (if possible). If you are not sure whether the medication you take contains steroids, please check with your GP.

Raised blood pressure

High blood pressure (hypertension) is a risk factor for developing CSC. It is important to get your blood pressure checked and to see your GP if it is raised, so you can discuss ways of reducing it.

Your GP may recommend lifestyle changes, such as weight loss and exercise (if appropriate). You might also need medications.

Smoking

Smoking has been shown to increase the risk of CSC. There is information in the Oxford Eye Hospital about ways to stop smoking. Your GP's surgery may also have a smoking cessation (stop smoking) service.

Acid reflux

Research has identified a possible link between acid reflux, which is associated with a *Helicobacter pylori* infection, and CSC.

If you are found to have *Helicobacter pylori*, this can be treated with a combination of antibiotics and antacid tablets.

Stress

The risk of developing CSC has been shown to be increased in people who experience high levels of stress.

Counselling for stress management and making lifestyle changes to reduce stress can be helpful.

What happens when I come to the clinic?

At your appointment you will have your vision checked, so you will need to bring your glasses.

Eye drops will be used to dilate your pupils, so that we can see the back of your eyes clearly when we examine you and do the imaging tests. This will make your vision blurry for around 4-6 hours afterwards. It will not be safe to drive during that time, so you will need to arrange for someone to drive you home, or accompany you home if you are using public transport or a taxi.

During the appointment imaging tests will be carried out, including a scan of the back of your eye. This is called optical coherence tomography (OCT) and allows us to look at the different layers of your retina in detail. This is a quick and painless procedure.

You may also need further retinal imaging, such as an angiography. This is a test which uses a dye to look at your retinal and underlying blood vessels. It can be used to work out where the fluid in your retina is coming from.

You will be asked if you have any allergies before having this test.

The dye will be given to you through a small plastic tube into a vein in your arm (a cannula). Images will then be taken of your retina. All this will be explained to you in more detail if you need to have an angiography.

You will also see an Ophthalmologist, to review the results of the imaging and to discuss potential treatment options. If you have CSC they will talk you through the management of the condition, including discussing any risk factors which might make your symptoms worse.

Treatment options

In many cases no treatment is advised, because the condition may get better on its own, or the risks of the treatment would be greater than the benefits.

Currently there is limited treatment available for CSC, but new treatments may be found from research trials.

For further information, visit:
ergo@ouh.nhs.uk or
scan the QR code opposite:



Photodynamic therapy (PDT)

A trial carried out across 4 hospital centres (Leiden, Oxford, Cologne and Paris) showed that PDT has an effective role in the treatment of CSC.

PDT combines the use of a low energy laser and a light sensitive dye called verteporfin. The dye is given through a vein in the arm and takes about 15 minutes to travel to your eyes. The verteporfin enhances the effects of the laser.

The aim of the PDT treatment is to encourage the abnormal fluid collection to get better, by sealing any leaking blood vessels.

During the PDT treatment, a low energy laser will be shone onto the back of your eye. Your doctor will tell you when the laser will start. It is important that you keep still and focus on looking at the red laser light. The laser treatment is not painful and takes just over a minute and a half.

After the PDT treatment, you will need to cover your skin in long sleeved clothing and wear dark glasses for at least 2 days, as the dye will make your skin and eyes more sensitive to sunlight.

You will be given further information and details about this before any treatment is carried out.

Micropulse laser

At the time of the production of this leaflet; there is not enough evidence from formally conducted trials to support its use in CSC

Medications

There are no medications that have been shown to be effective for treating CSC. A few different medications have been reported to be helpful for some people, but there currently is not enough evidence to support their use.

Eplerenone

A recent multicentre trial evaluated the drug eplerenone for the treatment of CSC, but no benefit was identified.

Coping with CSC

If the condition has affected your vision and made reading and detailed vision difficult, your Ophthalmologist will book you into a Low Vision clinic, to help make the most of your vision.

The Specialist Optometrists who run these clinics will carry out a full assessment of your eyesight. They will then work with you to find and show you how to use the most suitable magnifying aids.

Your Optometrist can give you information about optical magnifiers, electronic or large print books and lighting. They can also show you how to use technology, such as electronic tablets or computers, to change font (text) size, colour and contrast on the screen.

The Eye Clinic Liaison Officer (ECLO) can also give you information regarding local and national support societies.

There may also be ongoing research projects which you might be able to take part in. Current projects include evaluating enhanced electronic visual aids and studies into whether certain genes make people more likely to develop CSC.

How to contact us

Oxford Eye Hospital Eye Clinic Liaison Officer

(8.00am to 4.00pm, Monday to Friday)

Tel: **01865 231 137**

Email: eyeclinicliaisonofficer@ouh.nhs.uk

Specialist Retina Coordinator

(8.00am to 4.00pm, Monday to Friday)

Tel: **01865 234 567** choose option 1 followed by option 7 and ask for the Specialist Retina Coordinator

Email: ouh-tr.specialistretinalservices@nhs.net

Eye Casualty

When contacting the Eye Casualty, please quote your hospital number (MRN) and full name.

Tel: **01865 234 567**

Email: oeu.urgentreferrals@nhs.net

For further information please visit:

www.ouh.nhs.uk/eye-hospital

Useful information

MiVision Oxfordshire

Tel: **01865 725 595**

Email: info@MyVision.org.uk

Web: www.myvision.org.uk

Macular Society

Tel: **0300 30 30 111**

Email: help@macularsociety.org

Web: www.macularsociety.org

Royal National Institute of Blind People (RNIB)

Tel: **0303 123 9999**

Email: helpline@rnib.org.uk

Web: www.rnib.org.uk

Fight For Sight

Tel: **020 7264 3900**

Web: www.fightforsight.org.uk

Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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Oxford University Hospitals NHS Foundation Trust
www.ouh.nhs.uk/information



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