



Central Serous Retinopathy (CSR)

This leaflet explains what Central Serous Retinopathy is and how it can be treated / managed.

What is Central Serous Retinopathy?

This is a condition that affects a part of the eye called the retina. The retina is the film in the back of the eye responsible for vision. It is this delicate layer of tissue that is affected by CSR.

CSR is a condition that typically affects people between the ages of 20 and 40 years and is due to a disturbance in the choroid (blood-vessel rich layer) sitting behind the retina. Often there is a pinprick in the retinal pigment epithelium (RPE) (waterproof membrane layer at the bottom of the retina), resulting in fluid leaking from the choroid into the retina, causing a blister-like elevation of the retina.

What are the symptoms?

Typically people notice distorted vision, straight lines appearing curved or wiggly as though one is looking through a beer glass. Also the vision centrally may be blurred, mainly for close work. Later on, and if recurrent, the condition may lead to some wear and tear problems with the retina, causing a gradual reduction in the central vision. It is exceptionally rare that the effects of this condition can cause problems that require registration as partially-sighted as it only ever affects a small amount of vision.

What causes CSR?

No-one really knows, but several studies have been undertaken. It is not an infection and is most likely an auto-immune abnormality, which is where the body reacts against itself. Age affected is 20 - 40 years.

Male to Female Ratio is 10:1 with Whites and Asians much more commonly affected than Black people.

Up to 30% (3 out of every 10) people with bilateral (both eyes) central serous retinopathy are found to be taking steroids in some form; by mouth, cream for skin conditions or inhalers for asthma, so there may be some connection to this. Some stomach bacteria have been claimed to be a cause or deep water diving, and one current theory is that it is much more common in people with hard-driven and competitive personalities.

What is the treatment?

Generally speaking, it is a self-limiting condition that resolves spontaneously (gets better on its own) (85% (17 out of 20) people improve within 1-6 months) and require no specific treatment. The only treatment used is laser treatment to seal the leak. This results in quicker resolution and improvement of vision over the short term but makes no difference as to the final vision. Therefore, as this procedure does carry some risks, it is not undertaken routinely but is generally considered an option for those people where a quick improvement is important, e.g. airline pilots, train drivers. Laser treatment is normally considered in chronic or bilateral (both eyes) cases.

What is the likely outcome if I have CSR?

In the majority of cases, the vision is fully recovered after the first acute episode. However, the sharpness of vision and colours become progressively worse if the condition becomes chronic or recurrent. In some cases, abnormal blood vessels grow under the retina (choroidal neovascular membrane, CNV) which can suddenly distort and damage the central vision. This is due to fluid leakage into the retina causing significant disruption to its structure. If this happens, your doctor may request an angiogram test of your retina and then start you on a course of intra-vitreous injections (injections inside the eye) to help

maintain the vision, by reducing the fluid building up in the centre of the vision (macula).

Will glasses help?

Spectacles will not improve the condition. However, it is always wise to have an up-to-date spectacle prescription, which your optometrist or optician can organise for you. Up to 50% of people develop disruption to retinal layers, which can affect vision to a mild degree in the long term.

What to do if symptoms recur?

About 10% (1 in 10) people have recurrences. If this happens then you will need a review with an eye doctor.

Contacting us

If you have got a minor eye problem, please seek advice from your GP, optician or pharmacist. If you think your problem might be urgent, please attend Eye Casualty.

Eye Casualty (Reading):	Mon-Fri 8am to 5pm; Sat & Sun & bank holidays 9am-12.30pm; Closed Christmas Day and New Year's Day
Eye Casualty: Prince Charles Eye Unit (Windsor):	Mon-Fri 8am to 5pm; Sat 8.30am-12.30pm; Closed Sun & bank holidays
Greenlands Ward (Reading):	0118 322 7172 (24 hours a day)
Eye Day Unit (Reading):	0118 322 7123 (Mon-Fri 7am to 6pm)

Outside of Eye Casualty hours you should telephone your GP's out of hours' service, ring NHS 111 or if you have serious concerns, visit your nearest Emergency Department (A&E).

Further information

- NHS Website www.nhs.uk
- Royal College of Ophthalmologists Tel: 0207 935 0702
- Specific Eye Conditions www.eyeconditions.org.uk

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

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