



Central Serous Retinopathy (CSR)

What is Central Serous Retinopathy?

Central serous retinopathy (CSR) refers to the pooling of fluid that has leaked under the macula region of the eye. This is the region of the retina controlling central vision and allows you to see fine detail. It usually occurs to males between the ages of 20 to 50 but it can also affect women.

What are the symptoms of CSR?

The symptoms of CSR include the following:

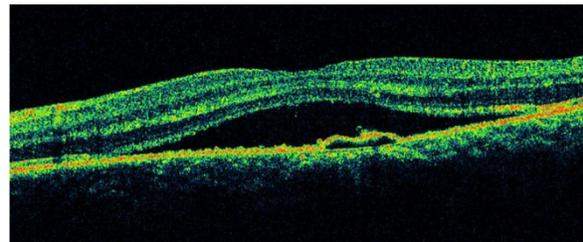
- Fairly sudden blurred vision
- A grey or dark spot in central vision
- Distorted vision - waviness of lines and shapes
- Altered colour vision

Diagnosis of CSR

The diagnosis will begin with a dilated examination of your eye where the doctor will notice the fluid at the macula. This would often be followed by an OCT and also fluorescein angiogram which is used to pinpoint the source of the fluid leak. During a fluorescein angiogram, a dye is injected into your arm and pictures of your eye.



Leak site



(above) Macula hole has a characteristic appearance when viewed under high resolution Optical Coherence Tomography (OCT)

(left) Fluorescein angiography is used to pinpoint the precise location of the leak at the macula

Causes of CSR

CSR is most commonly associated with increased circulating corticosteroids. These steroids may be medically prescribed (e.g. skin creams, inhalers, nasal spray or orally).

Very high caffeine and energy drink consumption may also contribute and should be avoided.

There are also some medical conditions associated with increased corticosteroids. These include stress, obstructive sleep apnea and Cushing's disease.

Recently, a disturbance in the sleep wake cycle (e.g. from long distance travel) has also been thought to be associated with CSR.

The medication Viagra may also be causative.

Rarely high blood pressure can present with a similar retinal appearance and so you may be asked to be assessed by your GP to exclude this also.

How is CSR treated?

CSR typically resolves without the need for treatment.

No treatment has been shown to improve visual outcomes compared to observation alone.

For those who suffer from persistent leakage, laser may be considered. This may be either cold (photodynamic therapy laser) or hot (argon laser). Your ophthalmologist will discuss which is most suited for your eye.

Usually vision improves to near normal in 1 to 6 months. However it is common for vision to remain 5% worse in the affected eye. There is no treatment that can prevent this or alleviate it.

CSR has traditionally been thought to have a 50% recurrence rate however with avoidance of the causative factors discussed above, this has reduced.