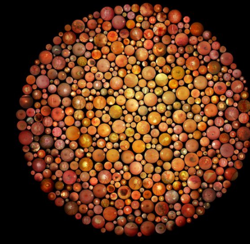
Central Serous Chorioretinopathy

Patient Information Leaflet

MEDICAL RETINA



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KEY POINTS

- CSCR is a build-up of fluid beneath the retina causing blurred central vision.
- Most episodes resolve on their own within three to six months.
- Steroids are the most important known trigger - please tell me about all your medications at your appointment.
- Treatment is available if the condition persists or recurs.
- Long-term disease can cause permanent vision loss; regular follow-up is important.

What is CSCR?

The retina is the light-sensitive lining at the back of your eye, responsible for capturing the images your brain interprets as sight. Beneath the retina lies a thin cell layer called the retinal pigment epithelium (RPE), and beneath that a rich network of blood vessels called the choroid.

In central serous chorioretinopathy (CSCR), fluid leaks through a weakness in the RPE and collects in a pocket beneath the retina, lifting it slightly away from its supporting layers. This distorts or blurs the central part of your vision. It is more common in men and typically affects people between the ages of 30 and 55. You may also see the condition referred to as central serous retinopathy (CSR) - the two terms are interchangeable.

Symptoms

CSCR affects central vision - the part used for reading, driving, and recognising faces - rather than your peripheral (side) vision. You may notice:

- A grey, dark, or blurry patch in the centre of your vision
- Straight lines appearing wavy or distorted
- Objects appearing smaller or more distant than they really are
- Colours appearing less vivid or washed out
- Difficulty reading, even with your glasses
- A change in glasses prescription that does not fully correct the blurring

Causes and Risk Factors

The underlying mechanism is not fully understood, but it involves abnormal leakiness of the choroidal blood vessels combined with a failure of the RPE to pump fluid away efficiently. Several factors are associated with a higher risk:

- **Steroids** - the most important known trigger, in any form: tablets, inhalers, nasal sprays, skin creams, injections, or eye drops. Please bring a list of all your current medications to your appointment, including anything bought over the counter.
- **Psychological stress** - major life stressors appear to precipitate episodes in some individuals.
- **Personality type** - research suggests a higher incidence in driven, competitive personality types, though the reason is unclear.
- **Certain medications** - some antipsychotics, sympathomimetics, and other drugs have been linked to CSCR-like presentations.
- **Pregnancy**
- **Genetic susceptibility** - some individuals appear to have an inherited tendency, though this is not yet well characterised.

How Is CSCR Investigated?

I will start with an OCT scan (optical coherence tomography) - a quick, painless scan of the retina that uses light to produce detailed cross-sectional images. OCT can confirm the presence of fluid and assess its extent and duration. Depending on your situation, I may also arrange:

- **Fundus fluorescein angiography (FFA)** - a yellow dye is injected into a vein in your arm and photographed as it travels through the blood vessels at the back of your eye. This identifies active leakage points and helps plan treatment.
- **Indocyanine green angiography (ICG)** - a complementary dye test that examines the deeper choroidal circulation.
- **OCT-angiography (OCT-A)** - a non-invasive scan that can detect abnormal blood vessel growth without a dye injection.

Not all patients need all of these tests, and I will recommend the investigations most relevant to your situation.

Treatment

For most people, the fluid resolves on its own within three to six months. During this period I will monitor you with repeat OCT scans. If you are taking any steroid medication, reducing or stopping it - if safe to do so - may help the fluid clear more quickly. You should only change steroid treatment with guidance from the doctor who prescribed it. When CSCR persists, recurs, or threatens vision, one of the following active treatments may be offered:

Photodynamic Therapy (PDT)

The most established treatment. A light-sensitive dye is given into a vein in your arm; a gentle laser is then applied to the leaking area at the back of your eye. PDT resolves the fluid in around 80% of cases, typically with one or two sessions. It carries a small risk (~1%) of damage to vision.

Subthreshold Micropulse Laser

Short, low-power laser pulses applied to the leaking area, designed to limit collateral damage. A good first-line option when the leaking point lies away from the centre of the macula. Anatomical results approach those of PDT over 12 months but tend to be slower in onset. If micropulse does not fully resolve the fluid, switching to PDT is effective in a high proportion of cases.

Oral Tablets

Mineralocorticoid receptor antagonists (such as eplerenone or spironolactone) have shown benefit in some trials. These tablets are better known for treating high blood pressure and fluid retention, and they require blood monitoring during use. Their role in CSCR is still being defined in ongoing research.

Anti-VEGF Injections

If abnormal new blood vessels develop beneath the retina as a complication of CSCR, intravitreal injections of anti-VEGF medication can treat these. This is not a first-line treatment for uncomplicated CSCR.

Potential Complications

In most people, CSCR follows a benign course. However, in a minority - particularly those with chronic or recurrent disease - complications can arise:

- **Choroidal neovascularisation (CNV)** - abnormal new blood vessels beneath the retina causing more severe vision loss. This is treatable with intravitreal anti-VEGF injections.
- **Permanent RPE damage** - prolonged fluid can cause irreversible dysfunction of the retinal support cells and lasting reduction in visual acuity.

These risks underline why persistent CSCR needs close monitoring and prompt treatment when indicated.

Will New Glasses Help?

Changing your glasses is unlikely to improve vision significantly while fluid is present, and any prescription obtained now may not remain accurate once the fluid has cleared. It is usually better to wait until the retina has fully settled before having new glasses made.

Follow-up and What to Watch For

I will arrange review appointments to track the condition with repeat OCT scans. The timing will depend on whether you are being monitored or treated. If your vision worsens suddenly before your next appointment, please contact my secretary promptly, as this may indicate a new development needing earlier review.