

# Retinal vein occlusion

**This leaflet explains more about retinal vein occlusions. If you have any further questions, please speak to a specialist caring for you.**

## What is retinal vein occlusion?

Retinal vein occlusion is a common cause of sudden, painless reduction or loss of vision in older people (it is uncommon in people under the age of 60). It occurs when an artery presses on and blocks one of the veins in the retina (the thin lining at the back of the eye that allows us to see). The retina is similar to a camera film. Blockage of one of these veins causes blood and other fluids to leak into the retina, resulting in bruising and swelling, as well as starving the retina of oxygen. This can interfere with the cells that detect light, and thus reduce vision.

There are two types of retinal vein occlusion: branch retinal vein occlusion (BRVO) or central retinal vein occlusion (CRVO).

BRVOs are due to blockage of one of the four retinal veins, each draining blood from one quarter of the retina. CRVO is due to obstruction of the main retinal vein which is formed by the four branches. Loss of vision is generally more severe if the central retinal vein is affected.

Retinal vein occlusions can be permanent. Some patients respond well to treatment but may still experience some reduction in vision following treatment.

## What causes retinal vein occlusion?

Retinal vein occlusion is caused by a blockage which obstructs flow of blood. The cause of this is generally unknown, but there are a number of common conditions that increase the risk of developing a retinal vein occlusion. These include:

- high blood pressure
- high cholesterol
- glaucoma
- diabetes
- smoking
- various rare blood disorders.

## What treatments are available?

Identification and treatment of any risk factors is very important in ensuring that further vein occlusion does not happen, either in the same, or the other eye.

Persistent swelling at the centre of the retina (macular oedema) is the main cause of visual loss. Sometimes laser treatment is beneficial in restoring some central vision. If the ophthalmologist suggests this, it is generally done around three months after the vein occlusion has occurred.

Your ophthalmologist may suggest a corticosteroid implant into the eye known as dexamethasone intravitreal implant (Ozurdex®). This drug helps to reduce any swelling at the central part of the retina, and thus improve vision. Ozurdex® is not suitable for all patients; however, the ophthalmologist treating you will be able to advise whether this is something that you are likely to benefit from.

There are also other medications that may be helpful if Ozurdex® is not suitable for you. These include medicines that have to be injected directly into the eye known as aflibercept (Eyelea®) or ranibizumab (Lucentis®). These will be discussed in more detail if the doctor thinks they are appropriate for you.

There is a chance that the blood supply can be permanently affected in the eye if the central vein is blocked. This can lead to abnormal blood vessels growing, which may need further treatments to the eye.

## Is there anything I can do to help myself?

If you have been identified as having any of the following risk factors, you may benefit from treatment for these:

- **High blood pressure** – if measured high repeatedly, treatment is normally advisable.
- **High cholesterol** – if you are found to have slightly raised cholesterol, you may wish to discuss diet modification with your GP, or your GP may suggest starting tablets called statins.
- **Glaucoma** – this is a relatively common eye condition caused by high eye pressure. Treatment with eye drops to lower the pressure is highly effective at preserving your sight and reducing the risk of further vein occlusions.
- **Diabetes** – diagnosis and good control of diabetes is essential to preserve vision. Diabetes can affect your vision in other ways, including diabetic retinopathy (damage to the retina caused by diabetes) and double vision.
- **Smoking** – the more you smoke, the greater the risk of developing a further vein occlusion. If you would like help to stop smoking, please speak to your ophthalmologist who will be able to refer you to Guy's and St Thomas' stop smoking service.
- **Various rare blood disorders** – these are often identified by simple blood tests. If they require treatment, you will be supervised by a specialist in blood disorders.

## Follow-up

If you have CRVO, you will have follow-up appointments every six to eight weeks for the first six months. After that the appointments may be less frequent. Most patients are discharged after two years.

If you have BRVO, your follow-up appointments will take place every four to six months for about 18 months. After that time, your symptoms are less likely to get worse.

## Contact us

If you have any questions or concerns about retinal vein occlusion, please contact staff in the Nettleship Clinic on 020 7188 4321 (Monday to Friday, 9am to 5pm).

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit [www.guysandstthomas.nhs.uk/leaflets](http://www.guysandstthomas.nhs.uk/leaflets)

## Useful sources of information

The Royal College of Ophthalmologists: [www.rcophth.ac.uk](http://www.rcophth.ac.uk)

The Royal National Institute of Blind People: [www.rnib.org.uk](http://www.rnib.org.uk)

### Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

**t:** 020 7188 8748 9am to 5pm, Monday to Friday

### Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

**t:** 020 7188 8801 (PALS)      **e:** [pals@gstt.nhs.uk](mailto:pals@gstt.nhs.uk)

**t:** 020 7188 3514 (complaints)      **e:** [complaints2@gstt.nhs.uk](mailto:complaints2@gstt.nhs.uk)

### Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch.

**t:** 020 7188 8815      **e:** [languagesupport@gstt.nhs.uk](mailto:languagesupport@gstt.nhs.uk)

### NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

**t:** 111

### NHS website

Online information and guidance on all aspects of health and healthcare, to help you take control of your health and wellbeing.

**w:** [www.nhs.uk](http://www.nhs.uk)

### Was this leaflet useful?

We want to make sure the information you receive is helpful to you. If you have any comments about this leaflet, we would be happy to hear from you, fill in our simple online form, **w:** [www.guysandstthomas.nhs.uk/leaflets](http://www.guysandstthomas.nhs.uk/leaflets), or **e:** [patientinformationteam@gstt.nhs.uk](mailto:patientinformationteam@gstt.nhs.uk)

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