

Patient information

Retinal vein occlusion

What is a retinal occlusion?

- Retinal vein occlusion (RVO) is a blockage of a vein in your eye.
- This blockage causes blood to collect in the vein resulting in swelling and bleeding into the surrounding tissue, affecting its ability to respond to light.
- It can lead to blindness in some patients if left untreated.
- If you have a RVO, you may notice a change in your sight which may range from dimming or blurring to complete loss of vision.

There are 2 types of RVO:

1. **Central retinal vein occlusion (CRVO)** is the blockage of the main retinal vein. The whole vision of that eye is affected.
2. **Branch retinal vein occlusion (BRVO)** is the blockage of one of the smaller branch veins. It usually affects a smaller area of the eye and vision may not always be affected.

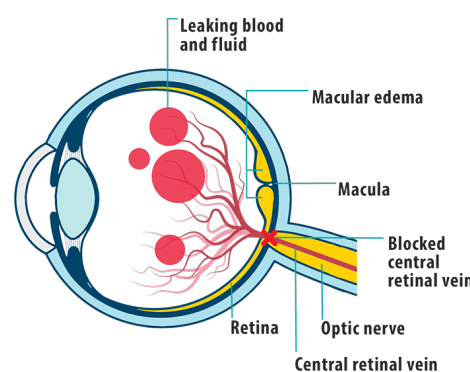


Image from <https://eylea.us/>

What causes RVO?

There is no single cause for RVO but these factors increase the likelihood of it occurring

- High blood pressure
- Diabetes & obesity
- High cholesterol
- Glaucoma
- Smoking
- Problems with blood clotting

RVO mostly affects older people because these factors happen more frequently as we get older. To reduce the risk and prevent further development of RVO, it is important that all your risk factors are well controlled. In some cases, a cause is not found.

What is likely to happen after I've been diagnosed with RVO?

Your ophthalmologist will discuss the need for the treatment depending on whether you have developed any complications from the retinal vein occlusion. Treatment is not always needed at an early stage, but you will be monitored at an appropriate interval.

It is currently impossible to remove the blockage in the retinal vein. However, we could minimise the damaging effects of the blockage and prevent further risk of complications.

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Complications of RVO

Macular oedema

A blocked vein can cause fluid leakage into the macular area of the retina. The swelling of this area leads to difficulties recognising faces, reading, or watching TV with that eye. There are two main treatments for macular oedema:

Anti-VEGF injections

- Anti-VEGF drugs work by reducing the leakiness of blood vessels and swelling in the macula.
- It is given as injections into the eye once a month for 3 months. Further injections might be required if they are needed.

Steroid injections

- Steroid is given in a form of an implant into the eye to control the swelling. It slowly releases the drug up to 6 months.

All the risks and side effects will be discussed when you visit the clinic.

New vessel growth

About 1 in 5 patients with RVO develop new abnormal blood vessels (neovascularisation) in the eye. These blood vessels can easily leak, bleed, and raise the pressure in the eye resulting in a condition called glaucoma. It can be treated by appropriate laser treatment.

Laser treatment

- This option can be used to treat new vessel growth. The aim is to stabilize the condition and not to improve the vision.
- Before the procedure, a local anaesthetic will be given to numb your eye as well as an eye drop to dilate the pupils.
- A special contact lens will be placed to hold your eyelids open and allow a laser beam to be focused on your retina.
- This treatment is usually not painful but you may feel sharp pricking sensation.

Further information

You may find useful resources following the link below.

- <https://patient.info/eye-care/visual-problems/retinal-vein-occlusion#>
- <https://www.rnib.org.uk/eye-health/eye-conditions/retinal-vessel-occlusion>

Acknowledgement

This information leaflet is adapted from Royal National Institute of Blind People (RNIB) and patient.info.