

Retinal vein occlusion

Retinal vein occlusion (RVO) is a condition where one of the small veins in the retina becomes blocked by a blood clot. It usually affects people over the age of 60.

RVO causes sudden blurred vision, usually in just one eye. RVO is painless and does not affect the appearance of the eyes.

The exact cause of RVO is unknown, but several conditions make the condition more likely. These include:

- High blood pressure;
- High cholesterol;
- Glaucoma;
- Diabetes;
- Smoking; and
- Certain rare blood disorders.

There are two types of RVO:

- Central retinal vein occlusion (CRVO) is due to blockage of the main retinal vein, which drains blood from the whole retina.
- Branch retinal vein occlusion (BRVO) is blockage of a smaller retinal vein, which drains about a quarter of the retina.

In general, vision loss is worse if the central retinal vein is blocked.

Treatment of retinal vein occlusion

Swelling at the of the central part of the retina is the main cause of loss of vision. This is called macular oedema. The swelling is caused by damaged blood vessels which leak fluid. Treatment usually controls the leakage and stabilises the vision.

Possible treatments for macular oedema include:

- Intravitreal injections;
- A steroid implant into the eye; or
- Laser treatment.

About 1 in 5 people with RVO develop abnormal blood vessels growing on the iris at the front of the eye or on the retina. These abnormal blood vessels can bleed or cause a marked pressure rise in the eye, leading to further loss of vision.

Regular check-ups to detect the abnormal blood vessels are required because laser treatment can prevent further problems. Laser is most effective if applied before vision is lost.