

Staffordshire Eye Clinic

t: 01782-614174
f: 01782-714957
e: mencomhouse@aol.com

Mencom House
2 Gower Street
Newcastle under Lyme
Staffordshire, ST5 1JQ

Retinal Vein Occlusion

A retinal vein occlusion is a blockage of one of the veins in the eye. The blocked drainage in the damaged vessels results in leakage of blood and exudation of a fluid rich in lipid and protein. This 'water logging' can damage the central sight.

Common causes include -

- High blood pressure
- Raised lipids / cholesterol
- Diabetes
- Smoking

A retinal vein occlusion may affect the central vein or a branch vein. The management of these two conditions differ.

Lifestyle and medical treatment

A healthy diet rich in greens and fatty fish twice weekly is advised. Regular exercise is helpful. High blood pressure and diabetes require exclusion. Some simple blood tests will be needed. It is usual to treat with cholesterol lowering drugs (statins). Aspirin may be recommended.

Eye Management

If the vision is reduced by macular oedema (water logging) treatment may be required. Retinal Laser (see separate advice sheet) may be required after performing a fluorescein angiogram test (see separate advice sheet).

Monitoring is often required for growth of fragile blood vessels (neovascularisation). These vessels can bleed and scar and laser treatment may be required.

A special type of vein occlusion (central retinal vein occlusion) may involve more intensive follow up in the first few months (often monthly) and may require early treatment. Branch retinal vein occlusion treatment is often best delayed because spontaneous improvement may occur.

Injection Treatments

Central Vein Occlusion (CVO)

Laser treatment for reduced vision associated with waterlogging (macular oedema) does not help. Injection treatments are useful for many patients. Early injections are recommended. There are two classes of injection namely steroid and anti-vascular growth factor injections (anti-VEGF).

The [Ozurdex implant](#) is the licensed eye steroid injection. It is required every 4 to 6 months. It will cause cataract and may cause glaucoma so it carries significant disadvantages as well as benefits.

Lucentis is the licensed anti-VEGF injection. Avastin is a cheaper off label alternative which appears to have broadly similar efficacy (see separate leaflet). The visual results in CVO are summarised below-

CVO Trial	Drug	≥15 letters gain at 6 or 12 months	≥15 letters loss at 6 or 12 months
GENEVA	Ozurdex vs Sham	18% vs 12%	6% vs 11%
CRUISE	Ranibizumab 0.5mg vs Sham	48% vs 17%	2% vs 15%

Branch Vein Occlusion (BVO)

Laser treatment for reduced vision associated with waterlogging (macular oedema) does help but is less effective than injection treatment. Spontaneous improvement may occur in the first few weeks and it is often wise to defer both laser and injection treatment. If macular laser is planned a fluorescein angiogram is usually obtained (see separate sheet).

The [Ozurdex implant](#) is the licensed eye steroid injection. It is required every 4 to 6 months. It will cause cataract and may cause glaucoma so it carries significant disadvantages as well as benefits.

Lucentis is the licensed anti-VEGF injection. Avastin is a cheaper off label alternative which appears to have broadly similar efficacy (see separate leaflet). Injections are given monthly for at least the first 3 months and may need to be continued. The visual results in BVO are summarised below-

BVO Trial	Drug	≥15 letters gain at 6 or 12 months	≥15 letters loss at 6 or 12 months
GENEVA	Ozurdex vs Sham	23% vs 20%	6% vs 11%
BRAVO	Ranibizumab 0.5mg vs Sham+laser	61% vs 29%	2% vs 5%