Ophthalmology Department

Macular Swelling due to Retinal Vein Occlusion (RVO)

This leaflet has been provided because you have a blocked blood vessel at the back of the eye, known as a **retinal vein occlusion (RVO)**.
This condition can cause blurred vision, often due to swelling in the central part of the retina (the **macula**), which is responsible for sharp, detailed vision. This swelling is called **macular oedema** and may lead to distorted or reduced vision.

Overview of Treatment

Unfortunately, there is no cure to treat the disease itself caused by a clot blocking one of the veins on the back of the eye. That would have resolved the problem.
However, treatments are available to reduce macular swelling and help maintain vision. These are usually given as injections into the eye (intravitreally) and may be required as a short course or as ongoing treatment.

This leaflet explains the available treatments, along with their benefits and risks. Your eye doctor will discuss your individual condition and recommend the most appropriate option for you.

Treatment Options

1. Anti-VEGF Injections

Anti-VEGF (anti–vascular endothelial growth factor) medications are injected into the eye to reduce leakage from abnormal blood vessels and prevent further damage to the retina.

Expected benefit:

- Around 50% of patients experience significant visual improvement after 12 months.
- In other cases, treatment improves vision or slows down its deterioration.

Available medications at CHFT:
- Ranibizumab and Aflibercept biosimilars as first line treatment.
- Vabysmo and Eylea HD as second line treatment in cases resistant to treatment with the first line treatment.

Treatment frequency:
- Varies between individuals.
- May range from no treatment to injections every 4–6 weeks.

Risks:
- Rare: severe inflammation inside the eye.
- Uncertain: possible association with stroke or heart attack (current evidence is inconclusive). It is important to remember that the mean age group that gets retinal vein occlusions and the associated risk factors of high blood pressure, raised cholesterol and blood glucose, is the same group that is more prone to developing strokes and heart attacks, therefore if this unfortunate event occurs after an injection, it would be very difficult to say that it would not have occurred without the injection.
- Injection-related risks (rare):
  - Intra-ocular infection and loss of sight (approx. 1 in 4,000 cases in the UK).
  - Retinal detachment.
  - Lens damage requiring cataract surgery.

2. Steroid Implant (Ozurdex – Dexamethasone)

This is a slow-release steroid implant injected into the eye using a slightly larger needle. It reduces inflammation and swelling over time. It dissolves and disappears from the eye over time.

Duration:
- Lasts approximately 4–6 months.

Treatment frequency:
- Typically, every 4–6 months, depending on response.

Risks and side effects:
- Raised eye pressure (about 25% of patients).
  - May require eye drops.
  - Rarely (0.5%), glaucoma surgery.
- Cataract progression (more common after repeated injections but can happen even after a single injection).
- Not always suitable for patients with pre-existing glaucoma.

Injection-related risks (rare):
- Intra-ocular infection and loss of sight.
- Retinal detachment requiring surgery.
- Lens damage requiring cataract surgery.

3. Laser Treatment
Laser may be considered in selected cases of branch retinal vein occlusion (BRVO). It is not effective for central RVO.

Risks:
- Small blind spot or blur in central vision.
- Failure to reduce swelling.
- Rare accidental damage to the macula.

The Injection Procedure
- Performed in a clean, purpose-built setting.
- The eye is numbed with drops.
- The surface is cleaned with iodine to reduce infection risk.
- The injection itself takes only a few seconds.

You may feel mild pressure or a brief pricking sensation.

Common Risks of Eye Injections
- Redness on the eye surface – conjunctival haemorrhage (not serious, usually resolves in 1–2 weeks).
- Corneal abrasion causing temporary discomfort (24–48 hours).
- Infection inside the eye (very rare but serious).
- Bleeding inside the eye.
- Lens damage leading to cataract that requires surgery.
- Raised eye pressure (more common with steroid implants).
- Retinal detachment.
- Low eye pressure (hypotony).

Clinic Visits
To monitor your condition and treatment response, you will undergo:
1. **Vision test** (reading letters on a chart).
2. **OCT scan** (non-invasive imaging of the macula).
3. **Acquiring photos of the back of the eyes.**
4. **Eye pressure measurement.**

Visit duration may vary depending on required tests and treatments.
We recommend allowing at least two hours for your visit to the eye clinic.

In case of emergency if you have concerns after injections, have any comments about this leaflet or the service you have received please contact:

Ophthalmology Department

Telephone: 01484 355085

www.cht.nhs.uk

If you would like this information in another format or language contact the above.

Potřebujete-li tyto informace v jiném formátu nebo jazyce, obraťte se prosím na výše uvedené oddělení

Jeżeli są Państwo zainteresowani otrzymaniem tych informacji w innym formacie lub wersji językowej, prosimy skontaktować się z nami, korzystając z ww. danych kontaktowych

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اگر آپ کو یہ معلومات کسی اور فارمیٹ یا زبان میں درکار ہوں، تو
برائے مہربانی مندرجہ بالا شعبے میں ہم سے رابطہ کریں.

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