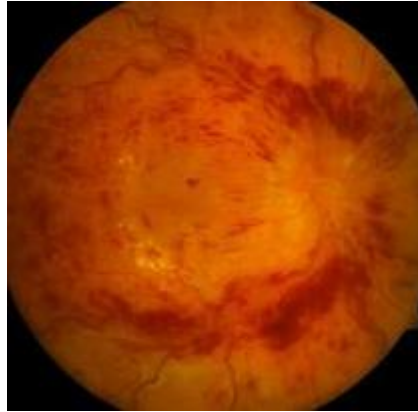


Retinal Vein Occlusion

Retinal Vein occlusions



There is a central retinal vein and artery that supplies the retina of the eye. When the retinal vein is occluded, blood cannot drain out. The retina swells and some blood escapes on to the retina. This causes a reduction or loss of vision. Retinal vein occlusion is associated with hypertension and vascular disease. Hardening of small retinal arteries can compress veins where they cross, causing blood to clot and stopping flow along the affected vein. If the main retinal vein is affected, it is called a Central Retinal Vein Occlusion (CRVO). If one of the smaller veins are affected, it is called a Branch Retinal Vein Occlusion (BRVO). The blockage can be complete ('Ischaemic', when insufficient blood flows) or partial ('non-ischaemic' - sufficient blood is still able to flow). The latter type can evolve to a complete blockage, which is associated with poorer visual outcome.

Diagnosis

The diagnosis can usually be made on examination of the retina by your ophthalmologist. Further tests such as a fluorescein angiogram and OCT may provide further information on the extent of the blockage and the amount of swelling or blood at the macula.

Treatment _Injections of medication called Vascular Endothelial Growth Factor (VEGF) antibodies, or inhibitor, originally used for “wet” age related macular degeneration have dramatically altered the treatment of retinal vein occlusion. These are given by injection into the eye. These injections are only mildly uncomfortable. Retinal branch vein occlusion is about five times more

common than central retinal vein occlusion. The decrease in vision associated with retinal vein occlusion is usually from swelling or oedema of the macula. Clinical trials have shown the best treatment for this macular oedema is injection with VEGF inhibitor alone. Previously watchful waiting or laser photocoagulation of the retina was used. Laser treatment is used much less now but may be used to treat areas of the retina which are short of blood supply. Occasionally injection of steroid into the eye is used for macular oedema resistant to VEGF inhibitor.

Treatment with VEGF inhibitor injections often need to be repeated to control the macular oedema and treatment may be required for up to 4 years or longer. The treatment needs to be personalised for each patient.

Risks associated with VEGF inhibitor injections include; cataract, retinal tear and retinal detachment and endophthalmitis or infection within the eye. These are serious complications but occur rarerly, endophthalmitis incidence is about 0.1% .