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BRANCH RETINAL VEIN OCCLUSION

A branch retinal vein occlusion (BRVO) may present with decreased vision, peripheral vision loss, distortion of vision, or "blind spots." If the main (central) vein (**CRVO**) occludes there is severe loss of vision. The condition is usually unilateral (in one eye) and usually develops in a patient with **hypertension**. The cause of the condition is a localized thrombus (blood clot) development in a branch retinal vein due to arteriosclerosis (**hardening of the arteries**) in an adjacent branch retinal arteriole.

The hemorrhages along the retinal vein are caused by a blood clot. The ophthalmologist will see retinal hemorrhages along the involved retinal vein, the pattern of which nearly always leads to the correct diagnosis. Many ophthalmologists will obtain a **fluorescein angiogram** during the recovery period if **neovascularization** (new blood vessels growing on the retina or iris) is suspected. A fluorescein angiogram is an extraordinarily safe, in-office diagnostic procedure, in which fluorescein dye is administered by IV or sometimes orally, and retinal photography is subsequently completed. A more modern test is Ocular Coherence Tomography which can be performed here at Broadmeadows

Patients are typically re-evaluated every one to two months to evaluate for chronic **macular edema** (swelling) and/or **neovascularization** (new blood vessels growing on the retina or iris). If macular edema persists beyond 3 to 6 months and visual acuity is reduced below 20/40, the patient may be treated with focal laser. For those patients who meet the guidelines for treatment, laser photocoagulation has been shown to improve vision and to increase the chances that final visual acuity will be 20/40 or better. If neovascularization develops, or if the BRVO involves a significantly large area of retina, which may predispose to the development of neovascularization, the patient may undergo pan-retinal laser photocoagulation. Many patients will have resolution of the retinal hemorrhages and macular swelling, over a several month period, with retention of good vision. For patients who have loss of vision due to persistent macular edema, either limited laser treatment or injection of medications into the eye may be considered.