

BRANCH RETINAL VEIN OCCLUSION (BRVO)

BRVO Often Causes a Sudden, Painless Loss of Vision

Retinal Vein Occlusion is the Second Most Common Retinal Vascular Disorder After Diabetic Retinopathy

Arteries carry blood from the heart to the body and veins return it. The retina contains one major artery and one major vein, called the central retinal vein. When branches of the vein become blocked, blood and fluid spills out into the retina, causing inflammation, damaging nerve cells and resulting in loss of vision. This condition is called Branch Retinal Vein Occlusion (BRVO). What causes BRVO and can it be treated? Please read the following to learn more.

01 | What Causes BRVO?

People with hypertension (high blood pressure) and arteriosclerosis are at a higher risk of BRVO than others. Other risk factors include diabetes and glaucoma. However, in many cases, no underlying cause is found.

02 | What are the Symptoms?

The most common symptom of BRVO is blurry vision or vision loss in part or all of one eye. You may also notice floaters – dark spots, lines or squiggles in your vision. These are shadows of the blood leaking into the vitreous fluid from retinal vessels.

03 | Diagnosing BRVO

During a thorough eye exam, an ophthalmologist will look for signs of retinal hemorrhage, thickened or twisted blood vessels and retinal edema. One or both of the following types of retinal imaging may also be performed:

- **Fluorescein Angiography (FA)** – yellow dye is injected into a vein in the arm, allowing a special camera to record circulation in the retina and the back of the eye.
- **Optical Coherence Tomography (OCT)** – an imaging technique using light to create a three dimensional image of the eye for evaluation.

04 | Treatment and Prognosis

Treatment includes three main components:

- **Treating risk factors** – hypertension, cholesterol and blood clotting disorders
- **Stopping the damage** – sealing off any leaking blood vessels in the retina
- **Treating retinal complications** – reducing macular edema with injections of anti-VEGF drugs

Overall, BRVO carries a generally good prognosis. Over 60% of patients maintain vision better than 20/40 after one year.

For more information, please visit:

<http://www.asrs.org/patients/retinal-diseases/24/branch-retinal-vein-occlusion>

*Did You Know?
BRVO is more common in
patients with hypertension*

References

<https://www.willseye.org/health-library/branch-retinal-vein-occlusion-brvo>

<https://www.aao.org/eye-health/diseases/what-is-branch-retinal-vein-occlusion>

<http://www.asrs.org/patients/retinal-diseases/10/glossary/#Fluorescein-angiography>