

# Retinal Vein Occlusion

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This material will help you understand retinal vein occlusion and how it is treated.

## **What is retinal vein occlusion?**

Retinal vein occlusion is like a stroke of the eye. It is similar to a stroke in the brain, which occurs when the vessels bringing blood to the brain clog up. A retinal vein occlusion happens when one of the major blood vessels feeding the retina becomes clogged. The retina acts like the film of the eye. If it is not getting any nutrients, it cannot function. You will have sudden vision loss as the “film” no longer has any input. Some of this vision loss may be recovered depending on how severe the stroke was and how long the retina went without blood flow.

## **What are the symptoms of retinal vein occlusion?**

When a central vessel in the retina clogs, the blood and fluid that is supposed to flow through it backs up. This can cause swelling. If there is swelling in the central part of the retina, called the macula, you will have very blurred vision. This swelling is called macular edema. The macula controls your fine detail vision. It helps you to read small letters, place thread through a needle, and read street signs. When you have swelling in the macula, it makes these kinds of tasks very difficult.

If the retina has no blood flow for a longer period, it begins to suffocate. This happens because it does not have enough oxygen. To protect itself, the retina sends out signals that cause more blood vessels to grow, bringing in more blood and oxygen. However, the blood vessels that the retina makes when it is sick are not good quality vessels. They often grow in the wrong places, leak,

and bleed. This process is called neovascularization. The new blood vessels can grow in the back of the eye. They can also grow over the iris (or colored part of the eye) or in the drain of the eye. If abnormal vessels grow in the drain of the eye, they can clog the drain and cause the eye pressure to go up. If the eye pressure becomes very high, it can damage the optic nerve and lead to glaucoma. Glaucoma can cause a permanent loss of side-vision if it is not treated.

### **What is the treatment for retinal vein occlusion?**

Your doctor will monitor you closely for signs of abnormal blood vessel growth after you have had a retinal vein occlusion. You will come in and have your drainage angle evaluated with a special contact lens (called a gonioscopy lens). You will have your eyes dilated to check the retina for abnormal blood vessels or swelling. If your doctor finds abnormal blood vessels anywhere, s/he may treat you with a laser treatment and/or medications injected into the eye.

One of the most common medications used to treat vein occlusion is anti-VEFG (anti-vascular endothelial growth factor) medications. These stop the blood vessels from growing. Another common group of medications is steroids. These help to calm all of the inflammation from the “stroke.”

If you develop elevated eye pressure or glaucoma after your vein occlusion, your doctor will put you on medications to lower your eye pressure or may even recommend surgery. It is very important to keep all of your follow-up appointments after having a retinal vein occlusion. The sooner your doctor sees any issue, the sooner s/he can treat it.

People who have diabetes, high blood pressure and heart disease are at higher risk of developing vein occlusions. To decrease your risk of getting another occlusion, take good care of controlling your chronic diseases. Take all of your medications on schedule. Eat healthy and exercise. If you smoke, now is a good

time to reduce the amount you smoke or for the best outcomes, quit smoking all together. This will decrease your chances of having another vein occlusion or a bigger stroke in your brain.

**For more information, scan this code with your smartphone or visit the websites listed.**



<http://www.geteyesmart.org/eyesmart/diseases/central-retinal-vein-occlusion.cfm>

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