



Dwayne B. Baharozian, MD  
*Eye Physician and Surgeon*  
Board Certified by American Board of Ophthalmology

*Glaucoma*  
*Cataracts*  
*Diabetic Eye Disease*  
*Laser Surgery*

### **Ischemic Optic Neuropathy**

Ischemic optic neuropathy (ION) is when blood does not flow properly to your eye's optic nerve, eventually causing lasting damage to this nerve. With ION, you suddenly lose your vision in one or both of your eyes.

The optic nerve carries signals from your eyes to the brain. Your brain then turns these signals into the images you see. When blood flow to the optic nerve is reduced or blocked, the nerve does not get enough oxygen or nutrition. The optic nerve stops working properly, causing vision loss.

ION can affect your central (detail) vision or side (peripheral) vision—or both. In some cases, only the upper half or lower half of vision is affected. Because a damaged optic nerve cannot be fixed, any vision loss from ION is usually permanent.

### **Warning Signs**

If blood flow to your optic nerve is reduced, your vision will darken for a few seconds or minutes then may return to normal. This is called a transient ischemic attack (**TIA**). This kind of attack can happen before ION begins. If you have TIA symptoms, call your eye doctor or primary care doctor right away. Finding and treating the problem as soon as possible can help prevent further vision loss from ION.

### **Diagnosis**

Your eye doctor will diagnose ION with a dilated eye exam which will likely include fundus photography, OCT imaging of the optic nerve, and visual field testing.

### **Treatment**

When ION is suspected or diagnosed, a systemic workup is necessary to determine the underlying cause. This will include a blood pressure check and bloodwork, and will likely include imaging (such as carotid artery ultrasound). Sometimes a biopsy of the temporal artery is required. If your ION is caused by swelling of arteries in your head (temporal arteritis), your eye doctor may have you take steroid (prednisone) pills. This medicine may prevent ION from developing in your other eye.

Treating any underlying health conditions can help protect your remaining vision and overall health. This could include treating high blood pressure, diabetes, or clogged arteries, as these are risk factors for ION.

Unfortunately, there is no treatment to reverse vision loss from ION. However, your eye doctor may suggest useful tools and techniques to help you function with low vision. It is imperative to treat any underlying health issues to minimize the risk of further vision loss.

5/2020