

# ISCHEMIC OPTIC NEUROPATHY

Ischemic optic neuropathy is an infarction (obstruction) of the blood supply to the optic disc. It often is referred to as a stroke of the *optic nerve*. There are two different types of the disease: *arteritic* and *non-arteritic*. Arteritic ischemic optic neuropathy is related to *inflammation* in blood vessels and is caused by a condition called giant cell arteritis (temporal arteritis). Non-arteritic ischemic optic neuropathy is associated with non-inflammatory sources of blockage in the blood supply, such as high blood pressure, diabetes and high cholesterol.

The ESR (erythrocyte sedimentation rate) test can determine if you have the arteritic form of ischemic optic neuropathy. The arteritic form of neuropathy is usually associated with high ESR and can cause serious damage and vision loss. If left untreated, it can progress to involve both eyes.

Non-arteritic ischemic optic neuropathy is the most common form of the disease. It typically occurs in persons 40 years of age or older. The disease begins with diminished visual acuity that happens suddenly, without pain, and often is irreversible but non-progressive (does not worsen over time). It leads to disturbance in the reflex of the pupil, in which it fails to contract (get smaller) in a normal manner upon exposure to light. Additionally, the optic disc is swollen or *edematous* in nearly all cases.

In addition to age, risk factors non-arteritic ischemic optic neuropathy include high blood pressure, high cholesterol, and elevated homocysteine levels. Elevated homocysteine levels are usually caused by deficiencies of folic acid (vitamin B9), vitamin B6 and vitamin B12. That's why ophthalmologist may prescribe vitamin B12 as a supplement in some cases. Deficiencies in these three B vitamins often are common in vegetarians. The only reliable food sources for these vitamins are meat and dairy products.