

Optic Neuritis

Overview

Optic neuritis refers to swelling or inflammation of the **optic nerve**. It is often associated with diseases causing demyelination (a loss of the protective myelin layer of the the nerve) of the optic nerve, but sometimes the cause is unknown. Multiple sclerosis (MS) is the disease most often associated with optic neuritis. It is not uncommon to have an episode of optic neuritis prior to being diagnosed with MS. In fact, optic neuritis is often the initial sign of MS.

Most patients with optic neuritis experience a sudden onset of decreased vision along with pain and soreness when moving the eye. Optic neuritis usually affects only one eye and may be a recurring problem with certain diseases such as MS.

Signs and Symptoms

The following symptoms of optic neuritis may not occur in all cases; however, they are the most common problems associated with the condition.

- Pain with eye movement (more than 90% of patients)
- Tender, sore eye
- Mild to severe decrease in central vision
- Dull, dim vision
- Reduced color perception
- Decreased peripheral vision
- Central blind spot
- Fever
- Headache
- Nausea
- Decreased vision following exercise, hot bath or shower (activities that elevate body temperature)

Detection and Diagnosis

The doctor takes several factors into consideration when diagnosing optic neuritis. The problem may not always be readily apparent by examining the optic nerve, so special attention is paid to the patient's symptoms and other tests. Pain with eye movement is a hallmark symptom of optic neuritis. The doctor may evaluate the pupils' reaction to light and order tests such as: **visual field**, color vision, and imaging of the brain (MRI).

Treatment

Since the Optic Neuritis Treatment Trial (ONTT), doctors have discovered that treating patients with intravenous steroid medication (but not oral steroids) reduces the risk of developing MS later on. This finding is very significant since approximately 50% of those who experience an initial occurrence of optic neuritis will develop MS. While this treatment has little if any impact on vision, it is important for overall health.

Optic neuritis characteristically improves over a period of days to weeks. For some, a complete recovery may take months.