

Ocular Histoplasmosis Syndrome

Ocular histoplasmosis syndrome (OHS) is a major cause of visual impairment in the eastern and central United States, where 90% of adults have been exposed to *Histoplasma capsulatum*. This common fungus is found in molds from soil enriched with bat, chicken, or starling droppings and yeasts from animals.

Although the fungus is not found directly in the eye, people with OHS usually test positive for previous exposure to *Histoplasma capsulatum*.

Histoplasmosis is usually mistaken for a cold. The symptoms are very similar. The body's immune system normally overcomes the infection in a few days. Generally, "histo spots," or small scars in the retina, do not affect vision, but for unknown reasons, some people can have ocular complications years or decades later.

Doctors believe that the histoplasmosis spores travel from the lungs to the eye where they settle in the choroid, the layer of tiny blood vessels that provide blood and nutrients to the retina, the light-sensing layer of cells lining the back of the eye.

Ocular histoplasmosis can affect vision when fragile, abnormal blood vessels grow under the retina. These abnormal blood vessels form a lesion known as a **choroidal neovascularization (CNV)**. If left untreated, the CNV lesion can turn into scar tissue and replace the normal retinal tissue in the macula.

The only proven treatment for OHS is a form of laser surgery called **photocoagulation**. The laser's small, powerful beam of light destroys the abnormal blood vessels as well as a small amount of the retinal tissue. Other treatments, including steroids and intraocular injections, are sometimes used. Treatment is not necessary unless the new vessels are in the macula, the part of the retina responsible for acute central vision.

Although only a very small number of people infected with the histoplasmosis virus develop OHS, if you have been exposed to histoplasmosis, you should be sensitive to any changes in your eyesight, and you should monitor your vision using an **Amsler grid test** at home.