## **OPTIC NERVE SCANS FOR GLAUCOMA**

Glaucoma steals sight by damaging the optic nerve. The optic nerve connects the eye to the brain and carries vision information to the brain. When the optic nerve gets damaged, not all of the vision information gets to the brain. This can create blind spots in you vision. In glaucoma, these blind spots often merge together to form tunnel vision. If not treated, glaucoma can take away all of your vision.

A careful examination of the optic nerve by your eye doctor is the most important part of a glaucoma evaluation. And repeated examinations of the optic nerve over time are the best way to make sure your glaucoma is well controlled and not getting worse.

In order to detect any changes in your optic nerve, your doctor must keep track of your optic nerve's appearance at each examination. Some common ways to record the appearance of the optic nerve include drawings or photographs. Another way that your doctor can record the appearance of your optic nerve is with a computerized optic nerve scan.

An optic nerve scan is a new and advanced method of evaluating the optic nerve. The test is simple and painless, and only takes a short time to perform. While resting your chin on the machine's headrest, the computer-guided device will scan the back of your eye without ever touching your eye. Each scan will only take a few seconds, and your doctor may obtain more than one scan to ensure that the information obtained from the scans is of high quality.

Once the scan is complete, a computer will analyze the data and compare your optic nerve to a database of normal optic nerves stored in its memory. A printout from the machine will tell your doctor if your optic nerve measurements are likely to be normal or if they look more like glaucoma. In this way, the optic nerve scan can play a role in making the diagnosis of glaucoma.

Once you have been diagnosed with glaucoma, your doctor may perform optic nerve scans periodically to see if you are stable or getting worse. If you have had previous optic nerve scans, the computer will compare your scan to your old scans to determine if any of your optic nerve measurements have gotten worse over time.

There are several optic nerve scanning systems available. They are similar in many ways, and different in some ways as well. They all provide measurements of the optic nerve, but each provides different kinds of measurements. Some measure the shape and contour of the optic nerve, while others measure the thickness of the nerve tissue surrounding the optic nerve. All have been thoroughly researched and found to be useful in detecting glaucoma. And most insurance programs cover optic nerve scans performed on an annual basis.

Optic nerve scans are a new tool your doctor can use both to tell if you have glaucoma, and to make sure that your treatment is working to prevent further optic nerve damage and loss of sight. If you have questions about optic nerve scans, your doctor will be happy to discuss them with you.