

Glimpsing glaucoma: The silent eye threat

When talking about eye issues, David Solá Del Valle, MD, encourages you to think about the organ as a tiny camera.

"There's a lens in the front of the camera. There's film in the back. There's a cable connected to the back of the camera," Dr. Solá, an ophthalmologist who performs surgeries at OSF HealthCare, explains. "That cable is the optic nerve. It connects the back of the eye to the back of the brain where the images get processed."

When the optic nerve is damaged, glaucoma results. Dr. Solá says this usually happens due to poor fluid drainage leading to high pressure on the eye. But glaucoma can also occur with normal eye pressure. Either way, Dr. Solá refers to glaucoma as mostly a "silent disease," because it typically lacks symptoms. That's why it's important to know your risk factors and see an eye doctor as needed. Some risk factors include:

- A family history of glaucoma
- Being African American, Hispanic, Indian or Asian
- Past eye surgery or co-morbid eye conditions like uveitis
- A long use of eye drops or steroids
- Medical conditions like diabetes, high blood pressure and heart disease

Dr. Solá adds that you should have a checkup with an eye doctor once a year or once every other year starting at age 40. Or, if you're younger than 40 and have an eye issue (something as simple as having glasses or contacts), you should see an eye doctor regularly.

"Getting checked early is the key to making sure you don't go blind from glaucoma," Dr. Solá says.

People who *do* have glaucoma symptoms are usually in the moderate or severe stage of the disease. "Late in the game," as Dr. Solá puts it. Impaired peripheral vision (what the eye sees on the sides when looking straight ahead) is the main symptom here.

"Driving is more difficult because their visual field is constricted," Dr. Solá gives as an example.

Diagnosis and treatment

An eye doctor can perform several tests in an outpatient setting to see if you have glaucoma. These include checking your field of vision, eye pressure, internal drainage, thickness of the cornea (the eye's outermost layer) and optic nerve.

Dr. Solá says there are many ways to treat glaucoma. So, treatment is tailored to your needs. Eye drops are a conservative treatment. Or a doctor may use a laser to improve internal drainage. This is separate from the eye's *external* drainage system that deals with tears. Laser treatment is an outpatient procedure that takes around five minutes, Dr. Solá says. He says the only after-effects may be some blurred vision for a very short time.

"It's very safe and very effective," Dr. Solá says.

"It used to be, 20 years ago, everyone got started on eye drops," he adds. "But I think there's more evidence that doing laser therapy first is the right way to go. And I'm a huge proponent of that. Eye drops have preservatives and side effects. Once you start them, you have to continue them the rest of your life unless you switch treatment."

More advanced cases of glaucoma or people who don't respond to eye drops or laser therapy may require surgery.

"Put a drainage device in the eye. Make a little hole in the eye so fluid can flow from the inside to the outside of the eye. Put a stent in the eye. There are many options," Dr. Solá explains.