Laser Iridotomy

What is laser iridotomy?

Laser iridotomy is a type of eye surgery that treats angle-closure glaucoma. Angle-closure glaucoma is when the iris blocks fluid (called aqueous) from leaving the front of the eye as it should. Pressure in the eye rises very quickly and the optic nerve is damaged. This is a serious problem that can cause blindness. Laser iridotomy helps fluid drain properly again, lowering your eye pressure.

Laser iridotomy is also used to prevent angle-closure glaucoma in people who are at risk for having this problem. Those people have what is called a "narrow angle."

Eye Words to Know

Optic nerve: A nerve at the back of your eye that connects to your brain. The optic nerve sends light signals to your brain so you can see.

Aqueous humor ("aqueous"): Clear liquid inside the front part of our eyes. It nourishes the eye and keeps it inflated. (Aqueous is different from tears, which are outside the eye.)

Drainage angle: The area of the eye where the aqueous humor drains from the front of the eye.

Iris: The colored part of your eye. It controls the size of your pupil to let light into your eye.

If the iris suddenly blocks the drainage angle, it is called an **attack** of acute angle-closure glaucoma. Symptoms of an attack include:

- hazy or foggy vision
- severe eye and/or brow pain
- headache, nausea, vomiting
- seeing rainbow-colored rings or halos around lights

An acute angle-closure glaucoma attack is an emergency. It must be treated quickly to prevent loss of vision. If you have these symptoms, call an ophthalmologist right away or go to a hospital emergency room.

Some people do not have symptoms with their closed-angle glaucoma, but high pressure is still damaging the optic nerve. This is called chronic angle-closure glaucoma. This condition often requires surgery. Ophthalmologists know that reducing eye pressure as soon as possible can save your vision.

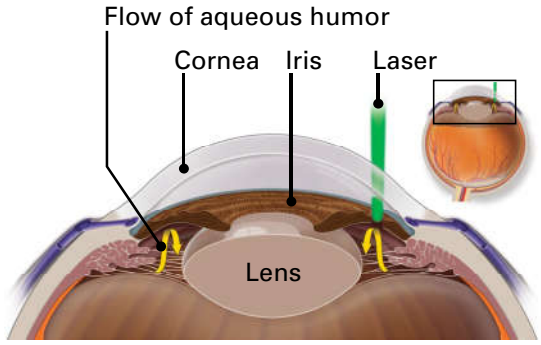
Angle-closure glaucoma is also called "closed-angle glaucoma" or "narrow-angle glaucoma."

How is laser iridotomy performed?

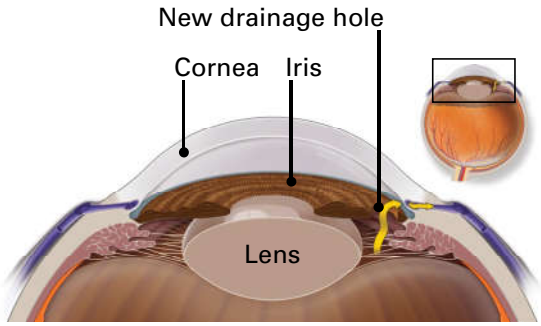
Laser iridotomy is done in an outpatient surgery center or in your ophthalmologist's office. Your eye surgeon uses a laser to create a tiny hole in your iris. This helps aqueous fluid flow out of the eye. It also helps the iris return to its normal position. The fluid can then move in and out of the eye as it should, lowering pressure.

Laser iridotomy only takes a few minutes. Here is what happens:

- Your eye will be numbed with eye drops. You may be given other eye drops as well to make your pupil very small.
- Your ophthalmologist will place a special contact lens on your eye. This serves as a guide for the laser.
- Using the laser, your ophthalmologist will precisely create a tiny hole in your iris. You may feel a stinging sensation as the laser is used.
- After the procedure, your vision may be blurry for a couple of hours. Plan to have someone drive you home after the surgery.
- Your ophthalmologist may prescribe medicine that you need to take for a few days after laser iridotomy.



Laser iridotomy: A small hole is made in the iris to create a new path for the aqueous fluid to reach the drainage angle.



After laser iridotomy: The new passageway improves the flow of aqueous fluid to the drainage angle.

Risks of laser iridotomy

Like any surgery, laser iridotomy carries risks. Fortunately, problems or complications are uncommon. Risks may include:

- headache or brow pain
- a sudden increase in eye pressure
- eye redness, swelling or pain
- bleeding in the eye
- blurry vision or seeing streaks of light
- cataract (clouding of the eye's naturally clear lens)
- the need to have laser iridotomy again, or to need additional surgery

Your ophthalmologist will talk with you about the risks and benefits of laser iridotomy.

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Summary

Laser iridotomy is a type of surgery to treat and prevent angle-closure glaucoma. This form of glaucoma is when your iris blocks fluid (called aqueous) from leaving the front of the eye as it should. Pressure in the eye rises and the optic nerve is damaged. Laser iridotomy helps fluid drain properly again, lowering your eye pressure.

If you have glaucoma, it is important to see your ophthalmologist regularly to check for any eye and vision changes.

If you have any questions about your eyes or your vision, speak with your ophthalmologist. He or she is committed to protecting your sight.

Watch an iridotomy video from the American Academy of Ophthalmology's EyeSmart program at **aao.org/iridotomy-link**.

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