

laser trabeculoplasty for open-angle glaucoma

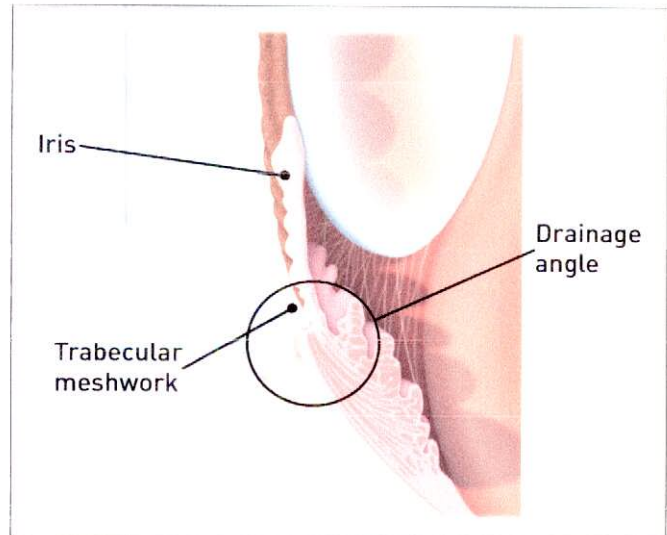
a closer look

WHAT IS OPEN-ANGLE GLAUCOMA?

Glaucoma is a disease of the **optic nerve** — the part of the eye that carries the images we see to the brain. The optic nerve is made up of many nerve fibers, like an electric cable containing numerous wires. When damage to optic nerve fibers occurs, blind spots develop. These blind spots usually go undetected until the optic nerve is significantly damaged. If the entire optic nerve is destroyed, blindness results.

The most common form of glaucoma is primary open-angle glaucoma. In this condition, the drainage channel of the eye becomes less efficient over time, allowing pressure within the eye to gradually increase. The increased pressure slowly and painlessly destroys the nerve fibers in the optic nerve.

Eyes have different abilities to withstand eye pressure. Some people develop glaucoma damage at normal pressures. When someone is at high risk for further nerve damage, treatment to lower eye pressure is necessary to prevent further vision loss. Early detection and treatment by your ophthalmologist (Eye M.D.) are the keys to preventing blindness for glaucoma.



In open-angle glaucoma, the drainage angle becomes less efficient at draining the aqueous humor.

HOW CAN LASER TRABECULOPLASTY HELP TREAT OPEN-ANGLE GLAUCOMA?

There are two types of laser trabeculoplasty: **argon laser trabeculoplasty (ALT)** and **selective laser trabeculoplasty (SLT)**. These procedures both use very focused light energy to treat the drainage channel. The laser does not create holes in the eye but instead causes the drain to work more effectively. Both types are effective in lowering eye pressure and do so more than 75 percent of the time. Lowering eye pressure is the only proven way to treat glaucoma.

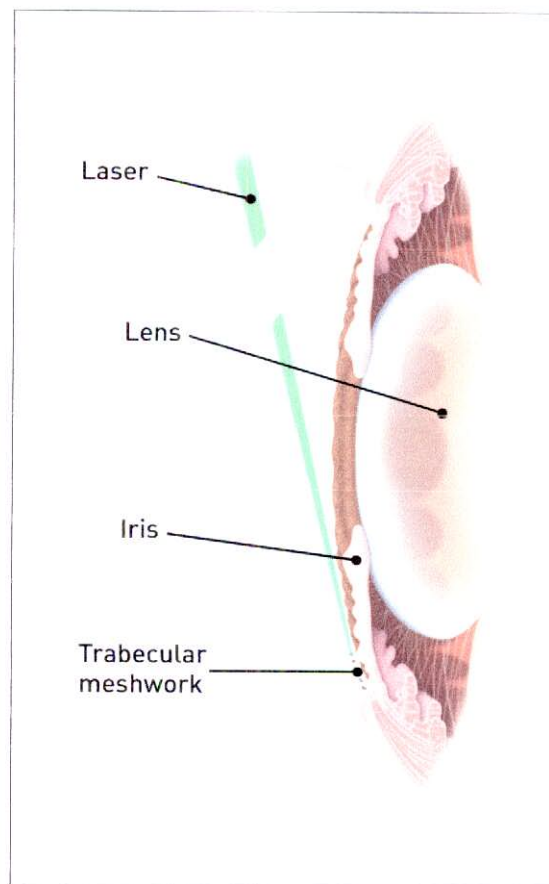
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The pressure-lowering effect of laser trabeculoplasty can lessen over time. Up to half of the people who have had laser trabeculoplasty will experience a rise in eye pressure. SLT uses lower energy levels than ALT; however, both allow for the option of having retreatment in the future.

HOW IS LASER TRABECULOPLASTY DONE?

The procedure is done in an ophthalmologist's office and usually takes less than 10 minutes. First, anesthetic drugs are used to numb the eye. Additional drops are given to control eye pressure. While you are seated at the examining microscope, the laser energy is then focused through a lens to treat the drainage channel. You will experience a flash of light with each laser application. There is usually no discomfort with your treatment. After the procedure your eye pressure is monitored. Your doctor may want to monitor your eye pressure for one to two hours. Very rarely, an elevation in eye pressure can occur and require additional treatment. Anti-inflammatory medications are often prescribed for several days after the procedure.

Vision is blurry immediately after treatment but clears within hours. Most people return to full normal activities the day after laser surgery. It will take several weeks for the laser treatment to take full effect. Your doctor will want to check your eye pressure one to two months after the procedure. If the eye pressure is not lower at the first visit, some additional effect can be gained up to three months after treatment. If lower eye pressure is needed your Eye M.D. will help you decide whether additional laser treatment, medication or surgery is required.



A laser makes tiny burns in the trabecular meshwork to stimulate the flow of aqueous fluid through the drainage angle.

Laser surgery can decrease the amount of medication you may need and is often recommended when you have difficulty inserting eyedrops or are not using eyedrops on a regular basis. Trabeculoplasty can also be used in addition to taking medicines or as a first line of treatment.

WHAT ARE THE RISKS OF LASER TRABECULOPLASTY?

As with any surgery, there are some risks of complications with laser trabeculoplasty (ALT or SLT). Possible complications include:

- Failure to adequately lower the eye pressure;
- Increased pressure in the eye, possibly requiring medications or surgery to lower it;
- Inflammation in the eye causing pain, redness or blurred vision;
- Damage to the cornea, iris or retina from the laser light.

There are always risks associated with medications and surgery. However, the risks should be balanced against the greater risk of leaving glaucoma untreated and losing your vision. If you have any questions about laser trabeculoplasty for open-angle glaucoma, you should discuss them with your Eye M.D.

NOTES

COMPLIMENTS OF YOUR OPHTHALMOLOGIST:

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