Laser Iridotomy

What are "narrow angles" and why are they a problem?

The eye is filled with a fluid that nourishes the eye and helps it keep its shape. The fluid drains out of the eye between the iris, the colored part of the eye, and the cornea, the clear part that covers the front of the eye. The balance between how much fluid is made and how much drains from the eye determines the pressure within the eye.

In some people, the eye is small. The iris and the cornea are close together forming a narrow angle. The angle is at risk of closing, often when the pupil is dilated. This can happen by itself, or be caused by medicine. When the angle is closed, the drainage tract is sealed off. When the fluid cannot leave the eye, the pressure in the eye rises sharply. As the pressure rises, the eye becomes red and painful and you may notice blurred vision, haloes around lights, a severe headache, and nausea. This is known as a "glaucoma attack" or acute angle-closure glaucoma. This is an eye emergency. If the pressure is not relieved, there may be permanent damage or even blindness.

Can angle-closure glaucoma be prevented?

A laser procedure, known as a peripheral iridotomy, can be done. A small hole is made in the edge of the iris to create a new drainage path for the eye fluid. The hole is about the size of a pinhead, and is often placed in the upper part of the iris so that it cannot be seen under the eyelid. Once this hole is created, it is very rare to have an angle-closure attack.

How is the laser iridotomy performed?

We’ll schedule you to arrive at the clinic 1 hour before the laser treatment for a pressure check and to have several drops put in your eyes. One drop, pilocarpine, will make your pupil smaller and will help to stretch your iris to make it easier for the laser to make the hole. Pilocarpine can cause a slight aching in your brow area (headache). The other drop will help to keep the eye pressure low during and after the treatment.
The laser treatment will be done after the drops have been in your eyes for about an hour. You will sit at a machine that looks like the slit-lamp microscope used for your eye exam in the clinic. The laser is attached to this machine. A drop of anesthetic will be put in your eye. The doctor will put in a special contact lens. You will focus on a target light in front of your other eye, and the doctor will “fire” the laser when you are in the correct position. Most patients say that they feel a slight pop or shock when the laser is “fired”, but say that it is not painful. The doctor may push slightly on your eye with the contact lens if there is any bleeding or oozing in your eye. The treatment takes only a few minutes for each eye that is treated.

You will also receive drops after the laser treatment. You will be given a prescription for drops to be used for the next 5 days, 4 times a day.

**Will I have any restrictions after the laser?**

There are no restrictions on your activities after your laser treatment.

**What should I watch for after laser treatment?**

Most people notice a slight blurring of vision because of the gel used with the contact lens. You may expect a slight redness or a scratchy feeling in the treated eye for a few days. You may also have a slight headache after the laser treatment.

**What are the risks in peripheral iridotomy?**

One risk of laser iridotomy is that your iris might be hard to go through and may need more than one treatment session. The hole in your iris may close, and may need to be opened again. There may be a small amount of bleeding in the eye after the treatment. This will be stopped by putting pressure on the eye with the contact lens. The laser could be fired at the wrong place in the eye, but this is very rare. Your pressure may go up after the laser treatment for a short time. If this happens, other medicines can be used to bring down the pressure in your eye. Rarely, glare or light reflections may be seen afterwards.
Do I really need to have this laser treatment?

A peripheral iridotomy will prevent you from having a glaucoma attack. Your eye doctor feels that you are at risk. No one can predict when or if you will have an attack. If you choose not to have this treatment, you need to know the risks and symptoms of angle-closure so that you can seek treatment from an ophthalmologist right away.

An eye that has had an attack of angle-closure may suffer permanently increased pressure, vision loss, or blindness. In contrast, a laser iridotomy is safe and effective, with few risks.

If you have a sudden loss of vision or a lot of pain beyond what was described above, please contact the clinic staff at:

**Phone Numbers**

University Station Eye Clinic, 8 a.m. to 4:30 p.m., Monday through Friday  
(608) 263-7171

When the clinic is closed, your call will be forwarded to the hospital paging operator. Ask for the “Eye Resident on Call”. Give the operator your name and phone number with area code. The doctor will call you back.

If you live out of the area, call 1-800-323-8942 and ask to be transferred to the above number.

Please call if you have any questions or concerns