

## 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 equals the pressure within the eye.

In some people, the eye diameter 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 I prevent angle-closure glaucoma?

You can have a laser procedure, known as a peripheral iridotomy to prevent this problem. 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. Once this hole is made, it is very rare to have an angle-closure attack.

### How is the laser iridotomy performed?

Your visit to the clinic for the laser procedure will begin with a pressure check and to have several drops put in to prepare the eye for the laser. One drop of pilocarpine will make your pupil smaller and the iris tissue more taut, like a drumhead. These drops can cause a slight headache that lasts for 20-30 minutes. 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. We will put a drop of numbing medicine 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 you have any bleeding or oozing in your eye. The treatment takes only a few minutes for each eye that is treated.

We will give you a prescription for drops to be used for the next 5 days, 4 times a day.

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

You will have no restrictions 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?**

One risk is that your iris might be hard to go through and may need more than one treatment session. The hole in your iris may scar closed, 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, we can use other medicines to bring down the pressure in your eye.

Rarely, you may see glare or light reflections after treatment.

### **Do I really need to have this laser treatment?**

This treatment will greatly lower your risk of having a glaucoma attack. There is no way to predict when or if you will have an attack, but we can detect if you are at an increased risk. 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 right away.

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

## **When to Call**

- If you have a sudden loss of vision
- Pain beyond what was described
- If you have any questions or concerns

## **Who to Call**

University Station Eye Clinic, 8 am to 4:30 pm, Monday through Friday  
**608-263-7171**

When the clinic is closed, your call will be sent to the paging operator. Ask for the “eye resident on call.” Give your name and number with area code. The doctor will call you back.

The toll-free number is:  
**1-800-323-8942.** Ask to be transferred to the above number.

If you are a patient receiving care at UnityPoint – Meriter, Swedish American or a health system outside of UW Health, please use the phone numbers provided in your discharge instructions for any questions or concerns.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 12/2019 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#4589