What is laser peripheral iridotomy (LPI)?

LPI is a laser done in the office to prevent or treat angle-closure glaucoma. It makes a small opening in the colored part of your eye (the iris).

- The drain of the eye sits in what is called the eye’s angle. The angle is where your iris and your cornea (the front window of the eye) meet.
- If the drain becomes blocked by your iris, your eye pressure can go up quickly to very high levels. These high pressure levels can cause very blurry vision or vision loss. Very high pressures can be very painful. It is an eye emergency, called acute angle closure.
- When this happens, the laser is needed right away to prevent permanent vision loss.
- If your angle is narrow but not yet completely closed, then the laser can be done to prevent the emergency.

The two main reasons to have this laser are:

1. To treat angle closure, if your drain is blocked.
2. To prevent angle closure, if you have narrow angles.

How is the laser done?

The laser is usually done in the office and takes only a few minutes.

- You will sit at the laser machine and get numbing eye drops.
- A lens will be placed on your eye.

- Your doctor will use one or two different lasers to create an opening in the colored part of your eye.
  - This helps to create a path for blocked fluid to flow in your eye.
  - This can also widen your angle and keep your angle from closing up.
- You may feel some stinging during the procedure.
- There are no injections or needles involved in this laser.
What to expect after the laser

• After the laser, your vision may be blurry for a few hours.
• Plan to have someone drive you home after the laser, especially if both eyes are treated.
• You can resume your normal activities.
• You will have your eye pressure checked before you leave.
• Eye drops will be ordered for you to use for a few days after the procedure.
• The point of this laser is not to make your vision better or worse. The goal is to keep your drain from closing up.

What are the risks of this laser?

This laser is a safe procedure, but there are some risks listed below. Most issues are temporary, if they occur at all.

• The hole made might close, and you may need more laser
• Eye pressure might go up right after the laser
• Inflammation may make your eye uncomfortable and require a longer use of eyedrops
• Bleeding inside the eye during the laser
• You may see streaks of light/lines when looking at a point of light
• You may have blurry vision
• You may develop a cataract more quickly than you naturally would do (cataract is a clouding of the natural lens inside your eye)

Summary

LPI is a laser used to treat or prevent angle-closure. The laser is used to make a tiny hole at the edge of your iris (the colored part of your eye). This helps the fluid inside your eye to flow. The laser is safe and is done in the office.

A hole was made in the iris, or colored part of the eye, using laser treatment. This patient kindly allowed the use of this photo for education purposes.