

# Laser Peripheral Iridotomy

## What Laser Peripheral Iridotomy is and what is it for?

You have been offered laser peripheral iridotomy (LPI) because you have or you are at risk of getting angle closure glaucoma (AGC). Angle closure is an eye condition where the drainage channel within the eye becomes narrow, leading to raised pressure inside your eye. This can happen suddenly (acute angle closure crisis) or gradually over time (primary angle closure). Persistently raised pressure within the eye can progressively damage the optic nerve over time, leading to vision loss (glaucoma).

The aim of this laser procedure is to create a very small hole in the iris (not visible to the naked eye) to widen the drainage angle and reduce the risk of developing primary angle closure glaucoma (PACG). It is also used to help in the treatment of PACG, if this is already present.

## What is the success rate? Are there any alternatives to this treatment? (ADD)

The studies show that in eyes with narrow drainage angles but no evidence of glaucoma, the risk of developing PACG per year is reduced from 1 in 100 to 1 in 200. The risk of developing an angle closure crisis per year is reduced from 1 in 1000 to significantly lower.

An alternative to LPI, could be surgical lens extraction, usually offered only when the eye pressure is raised above 30mmHg in the presence of a narrow angle.

Due to the low risk of developing PACG per year, observation only is also a reasonable option for some people provided they do not have any additional risk factors or evidence of glaucoma.

## What happens on the day?

You **MUST** not drive to this appointment. LPI is performed at a slit lamp with a laser machine attached to it, during an outpatient appointment. When you arrive, you will have your visual acuity and eye pressure checked. Some eye drops (pilocarpine) will be instilled to prepare the eye for the procedure, which can make your vision blurred for up to a few hours. An uncommon side effect of these drops is a temporary headache, which can be treated with over the counter pain killer tablets. Feel free to ask any questions about LPI to the clinician when the consent is signed for the procedure. Some anaesthetic drops and tear gel will be given to you to keep the eye comfortable during the procedure. A contact lens will be positioned on your eye to carry out the laser. The procedure takes approximately 5 minutes to each eye. Once it is carried out, we will ask you to wait about an hour to have the pressure rechecked. Your vision can be hazy until the following day.

A two-week course of anti-inflammatory steroid drops will be given to you to start the same day. If you take any glaucoma or other eye drops, please use them as normal unless specifically advised not to do so. We will see you again in about 4-6 weeks to assess the outcome of this treatment.

## What are the risks/side effects involved?

Generally, LPI is a low risk procedure. The most common side effect of the procedure (10% of cases) is a sudden temporary rise in the pressure, which can be treated as needed. Bleeding from the iris may sometimes occur during the procedure. The vast majority of these bleeds are small and transient. They do not cause any harm to the eye and tend to resolve spontaneously, without treatment. Very rarely a large bleed may occur, which is usually manageable with drop therapy and tablets until the bleed resolves.

A very small minority of patients experience visual disturbances after the procedure (generally described as ghosting, glare and lines across vision). Usually, these symptoms are temporary and resolve within a few months but in some extremely rare cases can be permanent.

Closure of the peripheral iridotomy is very rare and tends to happen only in the early weeks. LPI can be repeated if necessary.

If you experience sudden eye pain or marked loss in vision following laser treatment you should contact the **Glaucoma Unit** at **01392 406045** (Monday to Friday, 8.30 till 17.30). If this happens out of hours, please contact **NHS 111** or attend the Emergency Department.

The Trust cannot accept any responsibility for the accuracy of the information given if the leaflet is not used by Royal Devon staff undertaking procedures at the Royal Devon hospitals.

© Royal Devon University Healthcare NHS Foundation Trust

Designed by Graphics (Print & Design), RD&E (Heavitree)