

Information Guide

Eye surgery

Laser Iridotomy

Definition:

- Surgical procedure indicated for cases of angle closure of the eye, with a risk of duct closure (fluid circulation within the eye).
- The angle is where the cornea (the transparent bulb membrane) and the iris (the color of the eye) join. Flowing through the anterior chamber is a clear fluid called the aqueous humour, which maintains eye pressure. The duct is situated in the iridocorneal angle.
- Normally, the angle can be as wide as 45°. In a narrowangle the cornea and the iris compress the duct, which prevents proper drainage of the fluid resulting in an increase in eye pressure.
- Having a narrow-angle is not a disease process, it's a characteristic of the anatomy of the eye; it's more frequent in hypermetropic person (opposite of short-sighted) because the eye is shorter.
- The iridotomy procedure consists in creating a small opening in the iris (the color of the eye) to prevent the blockage of the aqueous humour (the fluid in the eye) therefore preventing an acute glaucoma crisis (increase in eye pressure). The opening allows the fluid circulation within the eye, instead of going through the duct. It's usually created in the upper eye in order to prevent glare: the upper eyelid hides it.
- The goal of the treatment is not to improve vision.
- A glaucoma crisis can be very painful and accompanied by nausea and vomiting, redness in the eye and blurry vision. Treatment is essential to prevent permanent damage to the optic nerve.

Procedure:

• Prior the procedure, the eye pressure will be measured. Drops will be applied to decrease the pressure (prevention) and to decrease the size of the pupil (Pilocarpine). Pilocarpine can sometimes cause a feeling of tightness in the eye, accompanied with headache and blurry vision. The effects can last for approximately 4 hours.

- During the procedure, you will be sitting facing the laser. Drops will be administered to freeze your eye.
- A lens is applied on the eye to be able to visualize the area to treat. You will be asked to stare at a light with the other eye and not move. The



Information Guide

procedure won't be painful and lasts about 5 minutes.

 After the procedure the eye pressure will be measured again if necessary. A final touch might be needed. You will not have any vision restriction.

Complications:

- A rapid short-term increase in ocular pressure (drops will be applied to prevent it).
- A small bleeding from the iris during the procedure.
- Inflammation.
- Short-term itching.
- Mild redness.
- All of the above can be treated without any long-term complications.

Other possible very rare complications:

- Corneal injury.
- Crystalline lens injury.
- Retinal injury.
- Depending on lighting, seeing a small horizontal bright line that usually disappears with time.

Personal notes:

Diet:

• You do not have to be fasting for this procedure.

Medication:

• Take your usual medication, except for your eye ointment.

Recommendations:

- No vision restriction.
- Do not drive after the procedure.
- Do not block the eye.

Be vigilant:

 In case of increasing redness and/or pain or an important decrease in vision, immediately consult a physician.

Nursing and Medical follow-up:

• As per your physician's orders.

Follow-up:

• Your next appointment will be in _____ months.

This guide makes recommendations in accordance with the scientific information available at the time of its publication, i.e. May 14th 2013. However, these recommendations are in no way a substitute for the judgment of a clinician. If you have any questions, we invite you to contact your healthcare professional. If in one way or another you misuse the information contained in this document, the CHU de Québec cannot be held responsible for any damages of any kind in this regard.



Copyright

No complete or partial reproduction of this document is permitted without the written permission of the CHU de Québec-Université Laval and other (s) as needed. © CHU de Québec or other (s) as needed, 2013. However, you can print it and use it for professional use.