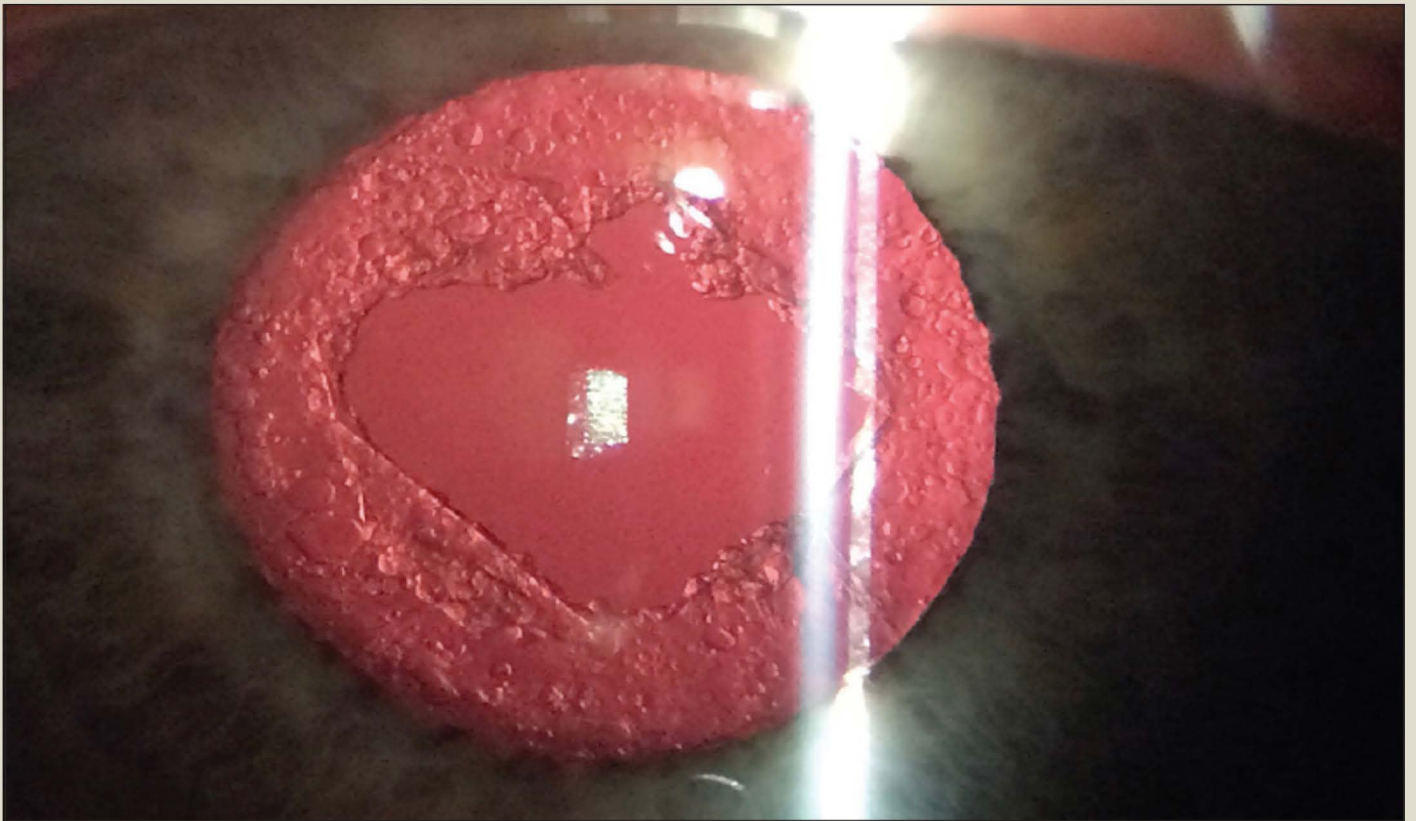




Group of Guidelines Consensus and  
Education in Ophthalmology®

# YAG Laser Posterior Capsulotomy





## YAG Laser Posterior Capsulotomy

**If you have problems reading this leaflet please ask us to send you a copy in a larger print size or in an alternative format.**

If your first language is not English or Arabic we can arrange for an interpreter to be available. Please let us know in advance if you require this service.

This booklet has been designed to help answer some of the questions you and your family or friends may have and to help you understand the procedure, to explain what is involved and what the possible risks are. If you have any questions and concerns, please do not hesitate to speak to a doctor or nurse caring for you.

### Introduction

This leaflet explains a treatment known as a “Yag laser posterior capsulotomy”.

### What is a laser?

A laser is highly concentrated beam of light.

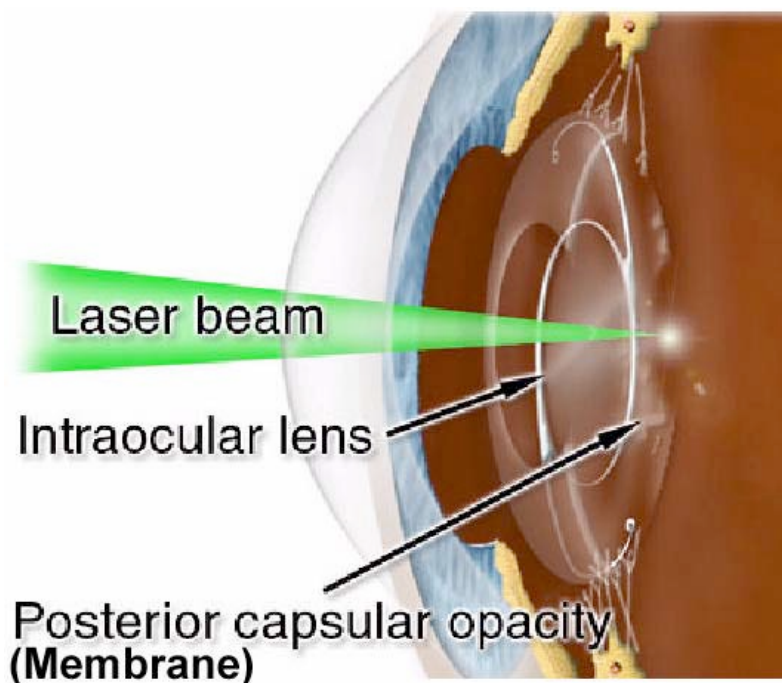
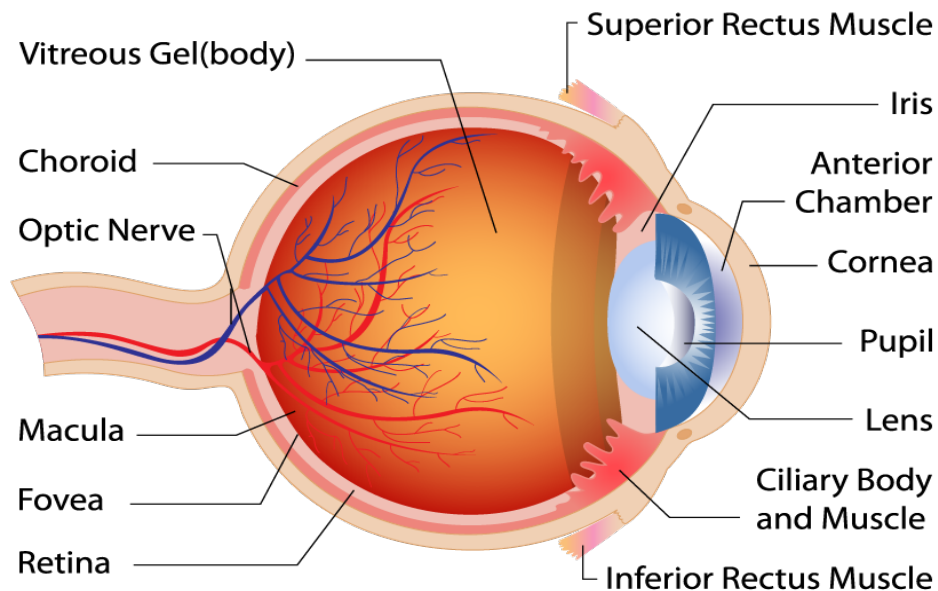
### What is a laser capsulotomy?

When you had your cataract removed, a thin, clear membrane was left behind to support your new lens. In about 20-37% of people this membrane becomes cloudy. This can make your sight seem misty. A laser can be used to make an opening in the centre of the membrane.

### Are there alternatives to laser treatment?

Instead of using the laser, a hole can be made in the membrane surgically. This is done very rarely as using the laser is a simpler option. You can decide to wait or decline having laser treatment.

## Anatomy of the Eye



### Benefits of treatment

The aim is to restore your vision to what it was after the cataract operation.

### **How do I prepare for the laser treatment?**

**Please do not drive yourself to the hospital. You will need to arrange for someone else to take you home after your appointment.**

**You must continue to use your usual medication (if any) as normal on the morning of the laser treatment for both eyes unless specifically told not to.**

**You can eat and drink and take your medication as normal before your appointment.**

**You'll need to bring your TV glasses [not the reading glasses] with you so that we can check your vision.**

You will need to visit the outpatient department for about half a day. We will carry out the treatment in one of our laser treatment rooms. You do not need to do any special preparations such as fasting or changing into operating theatre clothes.

There are no specific instructions that you need to follow prior to this laser treatment. The treatment is carried out in the Eye Outpatient Department.

Please read the information leaflet. Share the information it contains with your partner and family (if you wish), so that they can be of help and support. There may be information they need to know, especially if they are taking care of you following this treatment.

#### **Infection control**

You will receive antibiotic eye drops to attempt reduce the possibility of infection occurring following the procedure. If there are any signs of eye/eyelid infection present on the day of your planned procedure, your treatment may need to be re-booked for another time to allow control of such infection. Please inform your doctor or nurse if you have a sticky or discharging eye.

### **What will happen on the day of the treatment?**

Allow half a day for your procedure to include your intraocular pressure measurement. Your vision will be measured and you will be asked to sign a consent form outlining the risk and benefits of the procedure (as detailed in this information leaflet). You will be given rounds of drops before the laser is carried out.

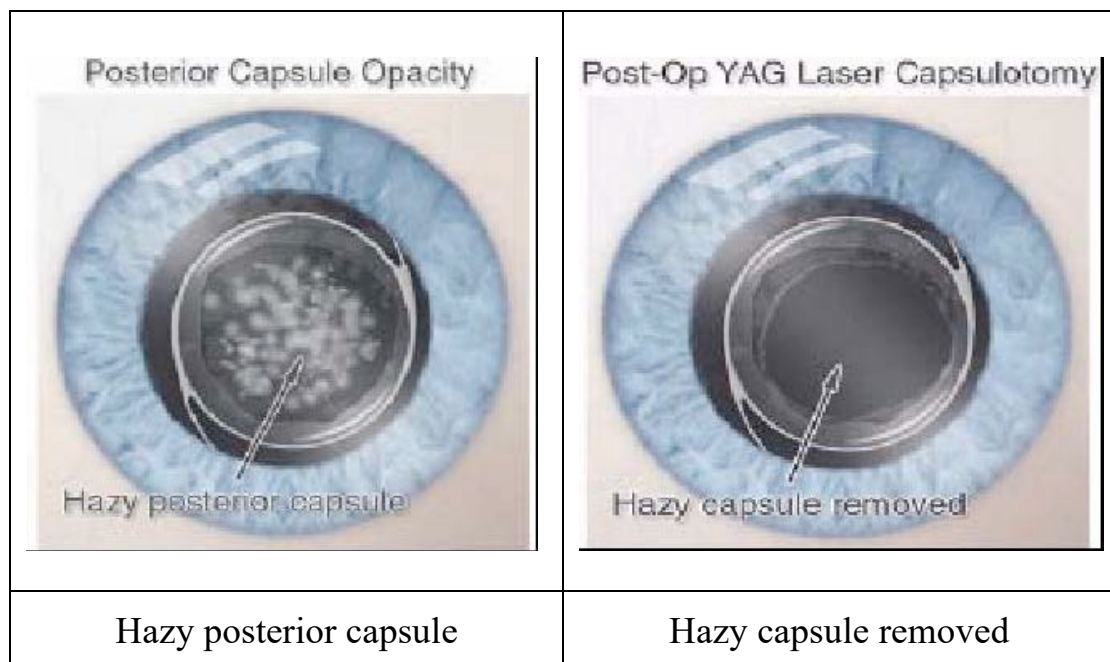
## Consent

It is important that you understand the procedure, what the risks and benefits are to you and what the treatment involves. Please feel free to ask your doctor any questions that you may have before signing the consent form. You will be asked to sign a consent form for the procedure.

**Although you will sign a consent form for this procedure, you may change your mind and decide not to proceed with the operation. Please discuss this with your surgeon.**

## The Procedure

The procedure takes place in a room separate from the clinic. The laser treatment is given through a standard eye examination microscope (slit lamp) connected to the laser machine. You will have some anaesthetic drops put in the eye just before the procedure. These often cause a slight tingling or stinging for a few seconds. You will be asked to place your chin on a rest and press your forehead against a narrow band. A contact lens is used to improve the doctor's view and prevent the eye from closing. It is important not to move; the vast majority of patients manage to keep still without any problems.



A bright white light is shone into the eye to allow the doctor to see where the treatment is being applied. This can cause the vision to be dimmed for up to 30 minutes afterwards. The treatment is painless due to the anaesthetic drop used to numb your eye before the laser, but you might

get a slight discomfort when the laser is being applied. In most cases, a pulsed (“YAG”) laser is used, which makes a soft clicking noise and gives a very short flicking sensation when activated. Occasionally, the treatment can be a little uncomfortable for a small number of patients and may experience a feeling of pressure at the back of their head for a second. The treatment takes about 5-10 minutes per eye.

You will be asked to wait 45-60 minutes in order for the doctor to check that the eye pressure is fine after the procedure. If the pressure is high, you will be given tablets and/or drops to use for a few days.

It is normal to have gritty, sticky eyelids and mild discomfort for a couple of hours after laser treatment.

You may also find that your vision is a little blurred. This is normal, and your vision should return to how it was after the cataract surgery by the end of the week.

You will have another check-up to see if the treatment was successful.

You can take your normal medication and/or drops as usual. You do not need to take any special precautions when you go home, you can continue with your usual activities.

After the procedure, you will be aware of ‘floaters’ (the feeling that something is floating in your eye) which should settle in the majority of cases with time.

You may find the glare of bright daylight uncomfortable after your eyes have been dilated, wearing dark glasses may help you feel more comfortable.

**You should not drive for 24 hours following the treatment. Please do not drive home after this procedure.**

### **Risks of treatment/ Side effects and complications**

Generally, laser capsulotomy is a very low-risk procedure.

About 1% of people may have a complication following a laser capsulotomy. Risks include:

1. Temporary rise in intraocular pressure. This will be detected by measurements taken after the procedure. The rise in pressure may last from hours to weeks. If it occurs, it is treated with medication in most of the cases. You will be asked to remain in the department until your eye pressure has reduced to a satisfactory level. This should take a few hours at most.
2. There is also a chance of Pitting of intraocular lens. Should it occur, it doesn't affect the vision in the majority of the cases.
3. Cystoid macular oedema can occur and can be more frequent in diabetic patients. This is a swelling in the retina at the back of the eye

which can be treated successfully with drops in most cases. Other very rare cases may require different treatments and can result in reduced visual outcome.

4. There is a small risk of developing a retinal detachment (a tear in the retina) which can occur years after the treatment. Should it occur, it would require surgery and may threaten the eyesight.

**More rare complications include:**

5. Whilst one treatment is usually enough, we may recommend further laser treatment at a later date if the laser hole is not large enough. If this is the case, we will have to repeat the treatment at a later date.
6. Lens dislocation.
7. Inflammation can also occur following the laser procedure. This can be treated with aftercare anti-inflammatory drops used for a week.
8. Trauma to the cornea (clear window at the front of the eye) can occur from the contact lens used during the procedure, or from the laser energy. However, this is rare and usually causes little trouble in the long term.
9. Complications requiring surgery. The risk of vision loss or the need for urgent surgery following the procedure is extremely rare (around 1 in 5,000).

**The following symptoms could mean that you need to be treated quickly, and that you should attend the Hospital A&E department:**

- **Sudden increase in floaters, flashing lights or a dark shadow spreading over your vision.**
- **Excessive pain.**
- **Loss of vision.**
- **Your eye becoming increasingly red.**

Although the above complications do occur, we take every precaution to reduce the risks and aim to give the minimum treatment necessary. You may wish to ask the doctor if you do not understand these medical terms.

### **When can I go back to work and when can I drive?**

The surgeon will advise you on this at your treatment appointment.

#### **How to apply your eye-drops or ointment**

1. Always wash and dry your hands before putting in the drops to prevent infection.
2. Sit or lie with your head tilted backwards and support it on the back of a chair, or a pillow for comfort and safety. Look up at the ceiling.
3. If the eye is sticky, use cooled boiled water to gently clean the lids, taking care not to poke the eye.
4. When putting the eye drops into your eye do not allow the bottle tip to touch your eye.
5. Gently pull down the lower lid with one finger to create a pocket for ease of access.
6. Holding the drop bottle on the bridge of your nose or your forehead, squeeze one drop into the eye.
7. Squeeze a drop or a 1 cm ribbon of ointment into the pocket of the lower lid.
8. Close your eyes for a timed five minutes.
9. Remove any excess eye drops/ ointment gently with a clean tissue and wash your hands again.

#### **Storage of eye drops and ointments**

1. Never share your eye drops with anyone else
2. Store drops and ointments in a cool place out of reach of children (only store drops in the fridge if requested to do so)
3. Dispose of all opened eye drops and ointments after one month

### **Further questions**

We hope this information is sufficient to help you decide whether to go ahead with the surgery. Please write down any questions not covered in this booklet and ask the doctor when you come to the hospital for your appointment. All our staff will always be ready and happy to give you the information you need.

**This brochure is not intended as a substitute for professional medical care. Only your eye specialist can diagnose and treat eye problems.**

If you have any further questions or concerns please contact your doctor.

### **Your comments**

We are always interested to hear your views about our leaflets. If you have any comments, please contact us.

## **References**

This leaflet was edited by specialist ophthalmologists from the GCEO Group® who are licensed in the EU and the Middle East. This leaflet was edited based and in accordance to the guidelines of the:

- The American Academy of Ophthalmology (USA) - Preferred Practice Pattern Guidelines:

<https://www.aao.org/about-preferred-practice-patterns>

- The Royal College of Ophthalmologists (UK):

<https://www.rcophth.ac.uk/standards-publications-research/clinical-guidelines/>

- National Institute for Health and Care Excellence (UK):

<https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/nice-guidelines>

- The International Council of Ophthalmology:

[http://www.icoph.org/enhancing\\_eyecare/international\\_clinical\\_guidelines.html](http://www.icoph.org/enhancing_eyecare/international_clinical_guidelines.html)

### **More resources:**

The American Academy of Ophthalmology (USA) - Eye Health A-Z:

<https://www.aao.org/eye-health/a-z>