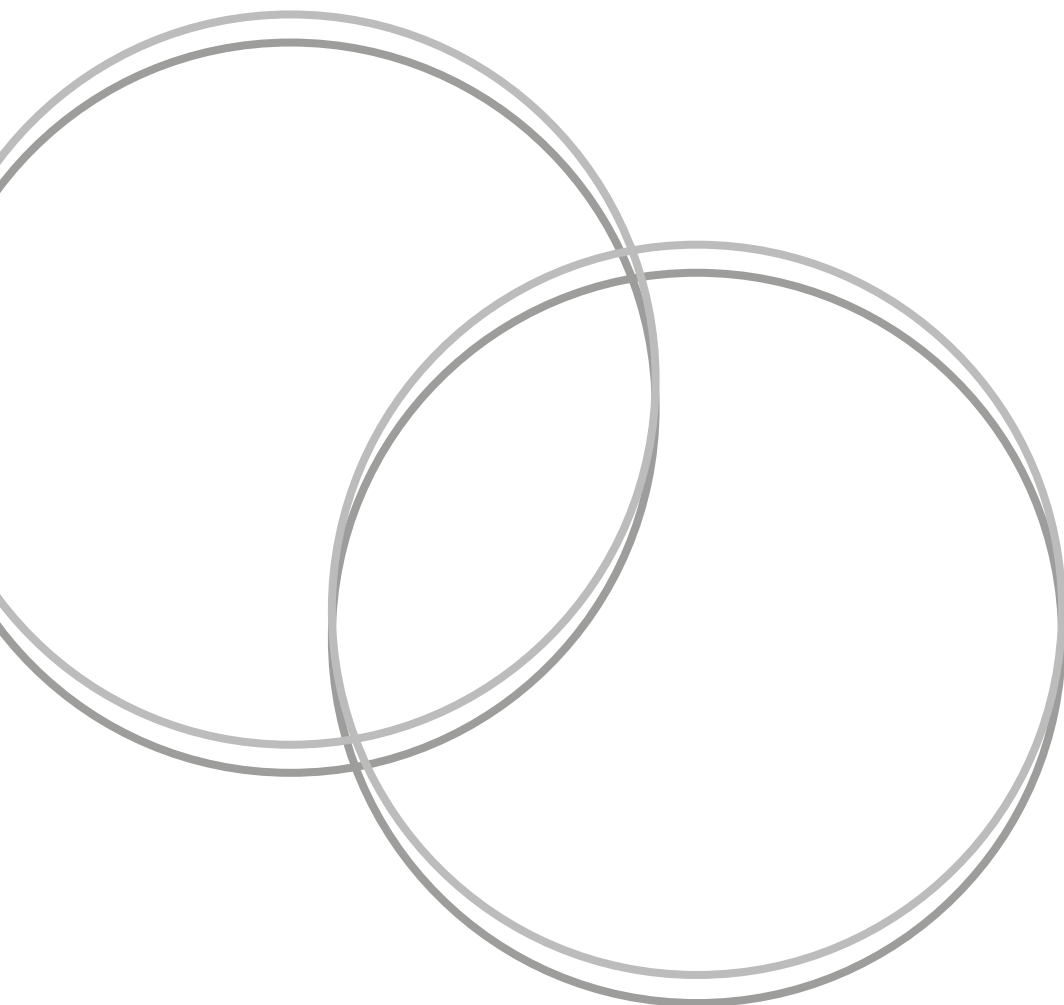




Oxford University Hospitals
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Lens Extraction in Primary Angle Closure

Information for patients



This patient information handout is for those who have been diagnosed with angle closure glaucoma or who are at risk of developing the condition (because of narrow drainage 'angles') and in whom clear lens extraction may be considered.

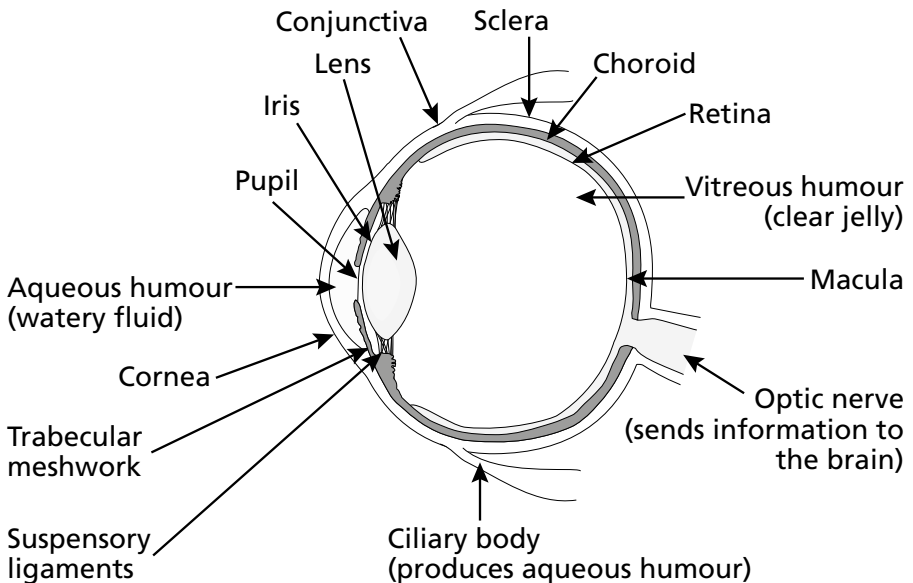
What is the angle and the lens?

The **angle** refers to the space between the clear (**cornea**) and the coloured (**iris**) parts of the eye close to where they meet near the edge of the iris. The angle contains the drainage system, which is the main structure directing fluid out of the eye.

The **lens** is a part of the eye that sits just behind the iris near the front of the eye. This lens continues to grow in thickness as we get older. The thick lens will then push the iris forward and cause narrowing of the drainage angle.

The lens is normally clear (when we are younger) and becomes cloudy as we get older. Clouding of the lens is known as 'cataract'.

The structure of the eye – side view.



What does it mean for the angle to be closed? What is Angle Closure Glaucoma?

When the angle is closed, it may cause increased pressure inside the eye.

Raised pressure inside the eye can then lead to damage to the nerve that connects the eye to the brain (optic nerve) which results in loss of vision. This is called 'Glaucoma'.

Raised pressure in the eye may happen suddenly or gradually. Every patient with narrow 'angles' is at risk. However, not every patient at risk will develop high eye pressure or glaucoma.

What are the treatment options?

1) YAG Laser Peripheral Iridotomy

The laser creates a small hole in the edge of the iris. This helps to widen the drainage angle. If the angle does not open after the laser treatment, then additional treatment may be required. This may include further laser treatment, eye drops to lower eye pressure and/or surgery. This hole will not be seen with the naked eye.

2) Clear lens or cataract extraction

Removal of a clear lens is called '**Clear Lens Extraction**' and removal of a cloudy lens (cataract) is called '**Cataract Surgery**'. The way the operations are done is exactly the same.

By removing the lens with surgery, the angle will open because the artificial lens implant we place in the eye after surgery is a lot thinner than the natural lens.

This will often help to reduce your eye pressure. It will also prevent an attack of sudden glaucoma crisis.

This option of lens extraction/cataract surgery can be considered as a first treatment or after YAG laser treatment. This is also a good option if you have a cataract which is causing blurry vision. Your ophthalmologist will discuss this with you. It is very important to be aware of some of the potential risks involved. Please see our cataract surgery leaflet which we will give you.

A decision to have surgery should only be made after careful consideration, particularly if you have a clear lens with good vision. If you have further questions or are unsure, it is essential you discuss this with an ophthalmologist before having treatment.

For more information and further resources please visit the 'International Glaucoma Association' website.

Oxford Eye Hospital – Glaucoma Service

Surgery is performed by the specialist glaucoma team in the department which includes:

Lead Consultants:

*Mr Gurjeet Jutley

*Mr Rajen Tailor

Glaucoma Fellows

Specialist Trainees

References

1. Acute angle-closure glaucoma: relative failure of YAG iridotomy in affected eyes and factors influencing outcome. Buckley SA, Reeves B, Burdon M, et al. *Br J Ophthalmol*. 1994;78:529–533
2. A randomized prospective comparison of operative peripheral iridectomy and Nd:YAG laser iridotomy treatment of acute angle closure glaucoma: 3 year visual acuity and IOP control outcome. Fleck BW, Wright E, Fairly EA. *Br J Ophthalmol*. 1997;81:884–888.
3. Effectiveness of early lens extraction for the treatment of primary angle-closure glaucoma (EAGLE): a randomised controlled trial. Azuara-Blanco, Augusto et al. *The Lancet* , Volume 388 , Issue 10052 , 1389 - 1397
4. International Glaucoma Association – Structure of the Eye.

Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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