

Information for Patients

Get a grip on your glaucoma

Welcome!

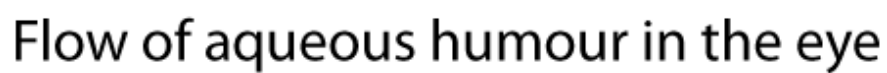
Group-based Glaucoma information Course

Aims of the session

- Discuss any questions you have and what you want to get out of the session.
- To learn how the eye works.
- To understand what glaucoma means.
- To feel confident to put in drops – practical session.
- To understand how drops work and their side effects.
- To help you to manage your treatment effectively and efficiently.
- To find out where to go for further information.
- To understand what to expect at your clinic visit.
- To know how to get the most out of your Eye Hospital visits.
- Provide information on lifestyle and driving in relation to glaucoma.

A detailed cross-section diagram of the human eye. The diagram shows the following structures: the cornea at the front; the iris and lens behind it; the large vitreous body filling the center; the sclera as the outer white layer; the choroid layer as a middle layer; the retina as the innermost layer at the back; the macula as a specific spot on the retina; and the optic nerve exiting the back of the eye, labeled 'optic nerve to brain' with an arrow pointing away.

Notes:





- Also called 'intraocular pressure' or IOP.
- Normal pressures – between 10 mm Hg and 21 mm Hg.
- High pressures – above 21 mm Hg.
- Target pressure – the pressure set by your consultant.

Notes:

Types of glaucoma

Normal Tension Glaucoma (NTG)

- The optic nerve is damaged even though eye pressure is not very high.
- Not known why some people's optic nerves suffer damage even though pressure levels are in the "normal" range (10-21 mm Hg).
- Might be due to poor blood supply to the optic nerve head or weak optic nerve structure.

Ocular hypertension (OHG)

- Raised eye pressure without loss of vision or optic nerve damage.
- People who have ocular hypertension are at risk of developing glaucoma.

Angle Closure/Narrow Angle Glaucoma

- Drainage angle blocked or narrow causing rise in intraocular pressure.
- May be due to thicker lens, thicker iris, shorter eye, smaller front portion of the eye.
- If an acute attack, the drainage angle is completely and abruptly blocked this is an ocular emergency.

Main risk factors for Glaucoma:

- Raised eye pressures
- Race (African-Caribbean)
- Genetics
- Family history
- Increasing age

Notes:

Putting in eye drops

Things to remember

- Put drops in near to same time each day.
- Drops expire 28 days from opening bottle – **so do keep a note of when opened.**
- Request repeat prescription at least 7 days before expiry date.
- Request 3 month prescription from your GP.
- Wash your hands before and after putting in drops.
- Remove contact lenses before putting in drops and do not re-insert before 15 minutes.
- Do not touch the tip of the bottle with your fingers or eye ball or eye lids.

Be safe, check:

- That you have been given correct drops.
- The expiry date on the unopened bottle.
- The storage instructions before or after opening.

Techniques

- Different ways to put drops in.
- Find what is best for you.
- Suggestions (see following photographs):
 - 'Moorfields' technique
 - Placing drop bottle on brow
 - Placing drop bottle on bridge of nose
 - Using a mirror
 - One handed

Moorfields technique



Placing drop bottle on brow



Placing drop bottle on bridge of nose



Using a mirror



This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. At the bottom edge, there are two light blue binder rings or clips partially visible, suggesting the paper is part of a bound notebook or folder. The overall appearance is clean and ready for writing.

A woman with brown hair is shown from the chest up, tilted back slightly. She is holding a small white bottle of eye drops in her right hand, with the tip of the bottle near her eye. She is wearing a red shirt, a gold bracelet on her right wrist, and a ring on her right ring finger. She has a small earring in her left ear. The background is a dark, possibly black, wall with some metallic fixtures.

Tips for putting in eye drops

- Wash hands.
- Gently shake the drop bottle.
- Unscrew the top (remove the safety seal on first opening).
- Adopt the technique that best suits you.
- Pull the lower lid of the eye out to form a small pocket between your eyelid and your eye.
- Hold the bottle between the thumb and index finger of the other hand, turn the bottle upside down near to the eye (try not to touch the eye with the bottle).
- Apply enough pressure to the bottle to release one drop.
- If you think that you have missed your eye then insert another drop.
- Use a clean tissue to mop up any excess liquid from your face.
- Replace the cap on the bottle
- Wash hands.

Practical session

- To improve confidence putting in drops.
- Learn alternative ways.
- Practice using artificial tears.
- Allergies to drops and preservatives.
- Contact lenses?

**Travatan (Travoprost), Xalatan (Latanoprost),
Lumigan (Bimatoprost), Saflutan (Tafluprost), Monoprost (Latanoprost)**

- Lower the eye pressure by increasing the fluid flow out of the eye.
- Redness or irritation in first few weeks – should get better.
- Can cause stinging.
- Eye lashes may grow longer, darker and thicker.
- Some people notice a change in iris colour over time. This is permanent.
- May notice darkening of skin around the eye.
- Headaches.
- Shortness of breath – less common.
- Skin rash – less common.

- Lower the eye pressure by reducing the amount of fluid produced.
- Main side effect is wheezing. People with asthma **should not** be given this type of drop.
- Stinging, redness or irritation in first few weeks - should get better.
- Skin rash.
- Dry eyes – less common side effects.
- Depression.
- Loss of libido or impotence.
- Very slow pulse rate, dizziness or reduction in exercise tolerance.

A decorative background featuring a large, light blue circle on the left side. Several light blue, angular, geometric shapes are scattered across the page, some overlapping the large circle. Three yellow circles are also present: one in the top left corner, one in the top right corner, and one in the bottom right corner. The entire background is covered with horizontal black lines, similar to lined paper.

- Lower the eye pressure by reducing the amount of fluid produced.
- Stinging, redness, or irritation in first few weeks – should get better.
- Blurred vision and a bitter taste straight after putting in drops – should go away after a few minutes.
- Headaches, dizziness, nausea – less common.
- Indigestion, dry mouth – less common.
- Shortness of breath – less common.
- Eyelid irritation and conjunctivitis.

A decorative background featuring horizontal lines, light blue geometric shapes, and yellow circles. The design is modern and abstract, with a mix of solid colors and patterns. The background is white with horizontal lines. There are several light blue geometric shapes, including a large circle in the bottom left, a large triangle in the top left, and a large rectangle in the top right. There are also three yellow circles: one in the top left, one in the top right, and one in the bottom right. The overall style is clean and contemporary.

Alphagan (Brimonidine), Iopidine (Apraclonidine)

- Reduces production of fluid in the eye.
- Headaches.
- Stinging, redness or irritation in first few weeks – should get better.
- Dry mouth, taste changes, dizziness, tiredness – less common.
- Allergic reaction can happen after long, successful use – red, puffy eyes and irritation.

Notes:

Pilocarpine

- Lowers the eye pressure by increasing the fluid out of the eye by making the pupil size smaller.
- Frontal headache.
- Blurred vision.
- Dim vision.
- Risk of accident.

Notes:

- Copies of the original drug.
- Has to be the same drug.
- Preservatives can vary.
- Bottle size, shape, colour, strength of plastic and size of hole **do** vary.
- Different storage instructions.

A decorative background with a light blue and white geometric pattern. The pattern consists of large, stylized, overlapping shapes that resemble the letters 'W' and 'M' in a light blue color. Interspersed among these are several yellow circles of varying sizes. The overall effect is a modern, abstract, and colorful design.

Allergic reactions can happen after long successful use

Tell your clinician if you start to develop red, puffy eyes and irritation

Notes:

Self-Assessment of managing eye drops

Notes:

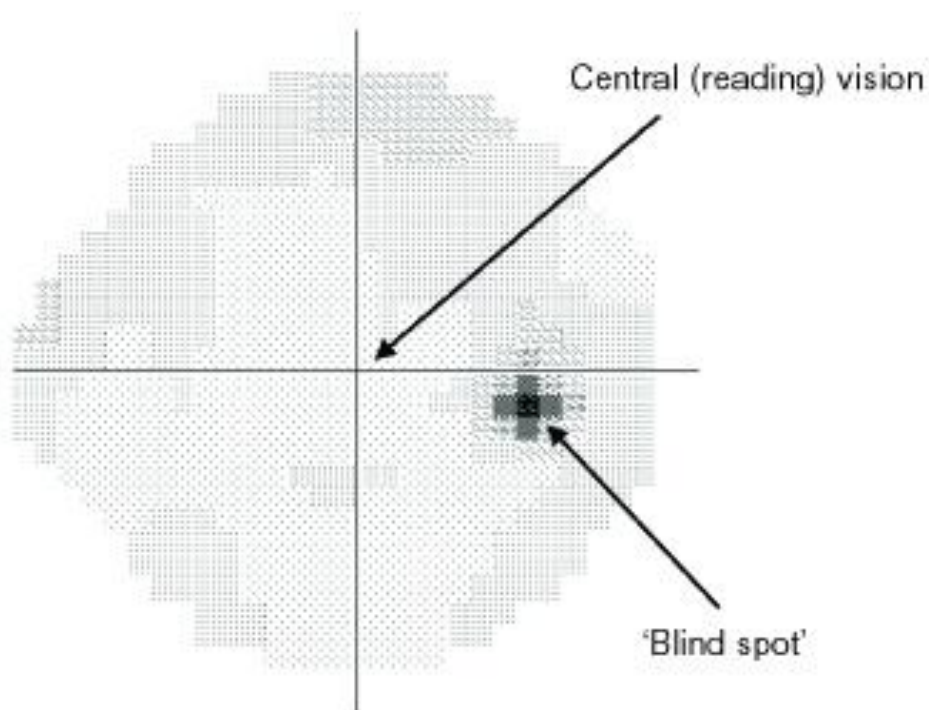
Problems people encounter:

- Forgetting to put drops in.
- Work different shift patterns and can't always put them in at the same time each day.
- Work away from home a lot, sometimes forget to pack drops.
- Go on holiday a lot, sometimes forget to pack drops.
- Forget to collect prescription in time.
- Cannot collect prescription.
- Get side effects from drops and don't want to use them.
- Do not believe that my eye drops are working.
- Unable to see the instruction label.
- Unable to squeeze drop bottle due to arthritis in hands etc.

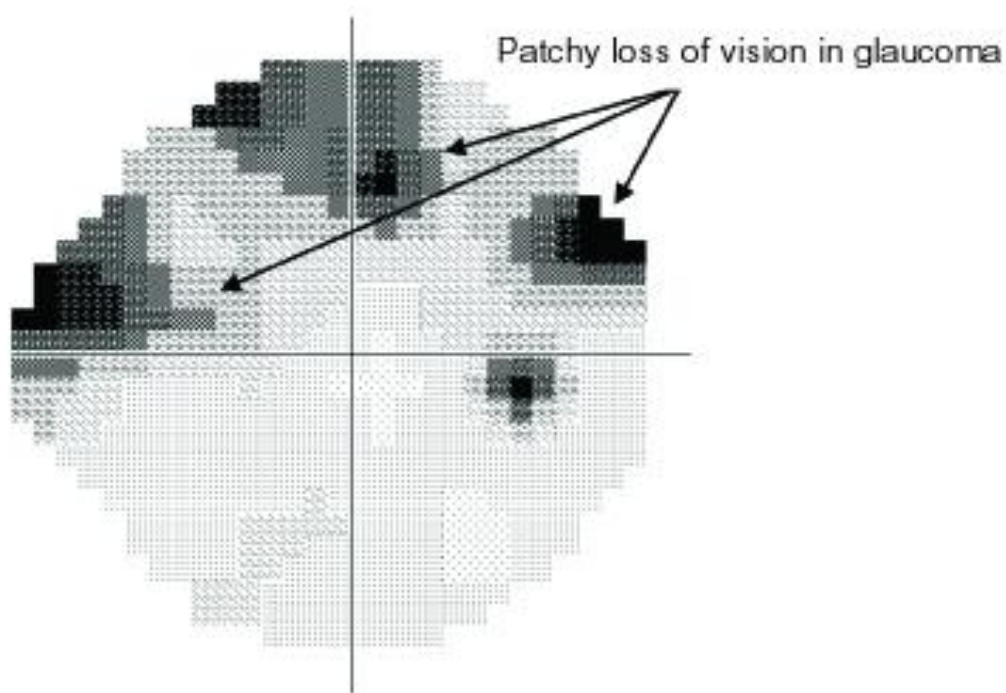
- Slit lamp examination - microscopic examination of the eye.
- Tonometry – Measurement of eye pressure.
- Gonioscopy – measurement of the drainage angles of the eye.
- Fundoscopy – assessment of the optic nerve.
- Pachymetry – measurement of the thickness of the cornea.

A decorative background featuring a large, light blue stylized 'W' shape. To the left of the 'W' is a yellow circle, and to the right is another yellow circle. At the bottom, there are more blue geometric shapes, including a large semi-circle and several triangles. The entire background is white with horizontal black lines.

Normal vision



Vision loss due to glaucoma



How to get the most out of your eye hospital appointment

- Write down important questions.
- Bring a list of all the medicines you take.
- Write down if you have had any side effects or symptoms since your last visit.
- Ask a friend or family member to go in with you if you wish.

During your appointment

- Don't be afraid to ask questions.
- Get the doctor/nurse/optometrist to explain anything you don't understand.
- Get words you don't understand to be written down and explained.
- Write things down or ask a friend or family member to write things down for you.

Notes:

Questions you might ask:

About your condition:

- 'Can you explain it again? I still don't understand'.
- 'What are my eye pressures today?'
- 'What are my target eye pressures?'
- 'Has my condition changed since my last visit?'
- 'Are there any new changes on my field test?'

Notes:

About any further tests:

- 'What are the tests for?
- 'How and when will I get the results?'
- 'Who do I contact if I don't get the results?'

Notes:

About treatment:

- Are there other ways to treat my condition?'
- 'What do you recommend?'
- 'Are there any side effects or risks?'
- 'How long will I need to take the treatment for?'
- 'How effective is the treatment?'
- 'What will happen if I don't have the treatment?'
- 'Is there anything else I can do to help myself?'

Notes:

What happens next and who to contact:

- What happens next? When do I come back and see you?’
- Who do I contact if things get worse?’
- Do you have any written information?’
- ‘Where can I go for more information, a support group or more help?’

Notes:

Before you leave your appointment:

Check that you:

- Have covered everything on your list.
- Understand what you have been told.
- Know what is going to happen next and when.

Notes:

Final tips

- Make sure you understand who to contact if you have any problems or further questions.
- Where to go for further reliable information.
- To ask for copies of letters written about you (if you want them)

If telephoning the hospital for information - be prepared!

- Have your hospital number available (it is on your appointment letters).

- State clearly the reason why you are telephoning.
- Write down what you want to say before you make the call.

Notes:

Lifestyle and Glaucoma

Don't let glaucoma limit your life

Emotional feelings

- Share your fears and feelings.
- Talk with others who have glaucoma.
- Avoid stress.

Exercise

- Aerobic exercise for 20 minutes, 3-4 times per week may reduce intraocular pressure.

Take care with:

- **Yoga/Pilates** – avoid head stances or inverted positions.
- **Weight lifting** – holding breath and straining raises pressure.
- **Scuba diving** – consult Ophthalmologist.

If you have visual field loss take care e.g. when cycling or playing ball sports.

Diet

- Can drink coffee, tea, cola (caffeine drinks).
- Drink small amounts of fluids over the day.
- Small amounts of alcohol are ok.
- Maintain a well-balanced diet.
- Vitamin B1 & B12 and antioxidants may help nerve protection.
- Eskimos who have a diet that includes fresh water fish, cod, salmon, tuna, sardines (rich in Omega 3 oils) have been shown to have low rates of open angle glaucoma.
- Gingko Biloba helps blood flow.

Smoking

There is no evidence that smoking is a risk factor for glaucoma, however:

- Older smokers have higher risk of developing increased intraocular pressure compared to non-smokers.
- Nicotine has been identified as an optic nerve toxin.

Glare and sensitivity

- Sunglasses or tinted lenses help with glare and contrast.
- Yellow, amber and brown tints are best for blocking out glare from florescent lights.
- Brown tints are best for bright sunshine.
- Yellow/amber tints are best for overcast days or night time.

General lifestyle

- **Flying** – no problems for people with glaucoma.
- **Wearing contact lenses** – does not affect intraocular pressure.
- **Playing musical instruments** – playing a wind instrument for a prolonged period may increase intraocular pressure.
- **Wearing tight neck ties**, collars or holding breath causes slight increase in intraocular pressure.
- **Blood pressure (BP)** – Maintain good BP control (low BP affects blood flow to optic nerve & high BP damages small blood vessels).

Other medications

Steroids - taken by mouth or inhalation, low risk of increasing intraocular pressure.

Cold and flu remedies – packet may state ‘avoid if you have glaucoma’. Contains a drug (pseudoephedrine) which causes slight pupil dilation – only applies if you have narrow angles.

Notes:

Driving and glaucoma

- Most people are still able to drive.
- To continue to drive, people must meet 2 standards:
 1. Central vision.
 2. Peripheral vision (edges of vision).
- Stricter standards apply for heavy goods drivers/bus or coach drivers.

What can happen to peripheral vision in glaucoma?

- Glaucoma damages the edges of vision (peripheral vision) first and can often go unnoticed for some time.
- Danger comes, especially in driving when the damaged areas in each eye overlap.
- The brain will insert the missing parts of the ‘picture’ from memory.
- The driver is not aware that this is happening.

When to inform the DVLA

- It is a legal requirement to inform DVLA if you have been diagnosed with glaucoma (with visual field defects) in both eyes.
- Ask your Doctor if you are not sure about your diagnosis.
- Fill out a V1 form and send to DVLA.

You don't need to inform the DVLA if:

- You are diagnosed with ocular hypertension (raised eye pressure without any field loss).
- You are diagnosed with glaucoma in one eye (and the other eye has normal vision).

What happens when you inform the DVLA?

- The DVLA will usually write to request information about your condition from your eye doctor.
- The DVLA may arrange for a field test to be carried out at an approved centre.
- The test is performed with both eyes open and differs slightly from the test you have at the eye hospital.

Notes:

Further Information DVLA

- Leaflet: '**Driving and glaucoma**' by the International Glaucoma Association.
- DVLA website: www.direct.gov.uk and search for 'glaucoma and driving'.
- **DVLA Telephone enquiries:**
0300 790 6806 (for car or motorcycle licence holders)

DVLA Address:

Drivers Medical Group
DVLA
Swansea
SA99 1TU

Further information

Glaucoma Support Groups

Manchester Royal Eye Hospital
Every 3 months
Rachel Hilton (Glaucoma Specialist Nurse)
(0161) 701 4819

Bolton
Royal Bolton Hospital Glaucoma Team
01204 390390 ext. 4806

Buxton
Norma Ayres Glaucoma Nurse at Cavendish Hospital, Buxton 01298 79236

Contact Numbers

Mr Au's secretary (0161) 276 8957
Ms Fenerty's secretary (0161) 276 5582
Ms Spencer's secretary (0161) 276 6949
Mr Mercieca and Mr Yau's secretary (0161) 701 5915

Glaucoma Appointments line (0161) 701 8291

Glaucoma Specialist Nurse (0161) 701 4819

International Glaucoma Association:

Website address: <http://www.glaucoma-association.com/>
Sightline telephone number: 01233 648170

Postal Address:

International Glaucoma Association
Woodcote House, 15 Highpoint Business Village
Henwood
Ashford
Kent TN24 8DH