Primary angle closure

This leaflet explains more about how to recognise and treat primary angle closure glaucoma. If you have any further questions, please speak to a doctor or practitioner caring for you.

What is glaucoma?

Glaucoma is a term that describes a group of eye conditions that affect vision. When the eye is functioning normally, fluid is produced inside the eye and is then drained away through the drainage channel. The balance between the production and drainage of the fluid creates a normal amount of pressure in the eye, which is needed for the eye to maintain its shape and function. If the fluid cannot drain away properly, the pressure in the eye rises. If the pressure is too high, the optic nerve at the back of the eye becomes damaged. The diagnosis of glaucoma is given when there is evidence of optic nerve damage.

What is primary angle closure?

The most common type of glaucoma is called primary open angle glaucoma. This is when the drainage channel (located between the iris and the cornea) is open. When the drainage channel closes, the iris moves forwards and against the cornea, blocking the pathway to the drainage channel and causing the pressure in the eye to rise. If this pressure remains high for a period of time, the optic nerve can be damaged, which then leads to primary angle closure glaucoma.

There are a number of conditions that are closely related to primary angle closure:

Primary angle closure suspect – This is when tests show that the drainage channel in your eye is narrow and is at high risk of closing up at any time. This is more common in people with smaller shaped eyes where the iris is naturally closer to the cornea.

Acute angle closure – Primary angle closure is usually painless and occasionally causes symptoms of mild headache. However, if the drainage channel suddenly closes and the pressure suddenly becomes very high, the signs and symptoms are usually severe. This is called acute angle closure.

What are the signs and symptoms of acute angle closure?

It is possible to experience an acute angle closure attack if you have been diagnosed with primary angle closure suspect or if you have primary angle closure and are waiting for treatment. It is therefore very important that you are aware of the signs and symptoms of an angle closure attack.

Symptoms include:

- intense pain of the eye
- sore or tender eye area
- headache
- redness of the eye
- blurred and reduced vision
- seeing coloured haloes around lights.
What should I do if I am experiencing any of these symptoms?
If you are experiencing any of these symptoms, you should seek medical advice as soon as possible.

You can attend the eye casualty in the South Wing of St Thomas’ Hospital between 8.45am to 4.00pm, Monday to Friday. Outside of these hours, you should attend the St Thomas’ accident and emergency (A&E) department.

If you do not live near St Thomas’ Hospital, you should attend a local hospital with an eye casualty unit.

What treatment is available for primary angle closure?
The two main treatment options are laser peripheral iridotomy and cataract extraction surgery.

Laser peripheral iridotomy
In this procedure, a laser beam is used to create a small hole in the iris. This provides another route for the fluid to flow and pushes the iris backwards, in turn helping to open the drainage channel. For more information on this procedure, please read the Having a laser peripheral iridotomy information sheet. If you do not have a copy of this leaflet, please ask the nurse or doctor caring for you.

Cataract surgery
When a cataract forms, the lens inside your eye slowly becomes thicker. This can push the iris forwards, causing the drainage channel to become narrower. In a cataract operation, the natural lens is removed and replaced by a thin artificial lens. This makes more room for the iris to move backwards and allows the drainage channels to open. For more information on this procedure, please ask for the Cataract surgery information leaflet.

Both procedures are effective in the treatment of primary angle closure. Your doctor will discuss with you the treatment that is best for you.

You may be prescribed glaucoma medication in the form of drops and/or tablets, which should be taken daily to control your eye pressures until the day of your procedure.

Your eye pressures may remain high even after the procedure. In these instances, drops may be needed to lower the eye pressures forever.

What happens if I do not get treatment?
If the pressure in the eye remains high, extensive damage can occur to the optic nerve. This will lead to significant and permanent visual loss.

Contact us
If you have any questions or concerns about your operation, please contact the eye casualty unit on 020 7188 4316 (Monday to Friday, 8.45am – 4pm).
Useful sources of information

Pharmacy Medicines Helpline
If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.
t: 020 7188 8748 9am to 5pm, Monday to Friday

Your comments and concerns
For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.
t: 020 7188 8801 (PALS) e: pals@gstt.nhs.uk
t: 020 7188 3514 (complaints) e: complaints2@gstt.nhs.uk

Language Support Services
If you need an interpreter or information about your care in a different language or format, please get in touch:
t: 020 7188 8815 e: languagesupport@gstt.nhs.uk

NHS 111
Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.
t: 111

NHS Choices
Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.
w: www.nhs.uk

Get involved and have your say: become a member of the Trust
Members of Guy’s and St Thomas’ NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, and to become a member:
t: 0800 731 0319 e: members@gstt.nhs.uk w: www.guysandstthomas.nhs.uk/membership

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