



Glaucoma

Glaucoma is a disease of the optic nerve. Progressive damage of the optic nerve will lead to irreversible reduction in visual acuity, visual field loss and blindness.

Types

There are many different types of glaucoma. It can be divided into chronic and acute glaucoma. On the other hand, it can also be classified as primary and secondary glaucoma.

- **Chronic Glaucoma**

Chronic glaucoma often has no symptom in its early stage. In the advanced stage, patient may only see with central vision (i.e. tunnel vision) and have difficulty in seeing surrounding objects. It can result in total blindness if the disease further deteriorates.

- **Acute Glaucoma**

Acute Glaucoma is characterized by a very rapid rise in eye pressure (intraocular pressure) and sudden onset of the following symptoms: blurring of vision, halos, red eye, hazy cornea, severe eye pain, headache, nausea and vomiting. Permanent vision loss can occur within one day and therefore it is very important to seek medical care promptly.

- **Primary and Secondary glaucoma**

Primary glaucoma usually does not have obvious causes but may be associated with other factors (see Causes below). In secondary glaucoma, the increase in eye pressure occurs as a result of other illnesses, including hyper-mature cataract, uveitis, bleeding inside the eye, tumor, trauma, post-operative complications and improper use of steroid.

Causes

Primary glaucoma is related to ethnic/genetic factors. Patients with positive family history and high myopia are at higher risk of glaucoma. Secondary glaucoma is related to other ocular conditions like hypermature cataract, uveitis, severe diabetic retinopathy, vitreous haemorrhage, tumour, trauma, operation and inappropriate use of steroid eye medications.

Risk Factors

- High intraocular pressure
- Family history
- History of diabetes, high blood pressure and heart disease
- Chronic eye inflammation
- Long-term use of steroid
- Shallow anterior chamber and narrow anterior chamber angle

Treatments

The aim of treatment is to avoid further damage to the optic nerve by controlling the intraocular pressure and this is achieved by the following means:

- **Topical eyedrops**
- **Laser therapy**
- **Surgery**

The treatment is individualized basing on the type and severity of glaucoma of the patient.

Remarks

- Early detection
- Prompt treatment
- Good drug compliance
- Regular follow up

The information is for general education purpose and reference only.

Should you have any queries, please consult medical professionals

Specialty Advisory Group (Ophthalmology)

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