Hypertensive Glaucoma

In general, glaucoma is caused by increased pressure inside the eyeball, thus damaging the optic nerves and causing vision deterioration and narrowing of the field of vision.

People at Higher Risk for Glaucoma

Those with the following conditions are at higher risk for glaucoma, and should undergo eye check-ups regularly:

1. Family history of glaucoma
2. High myopia
3. Diabetes mellitus
4. Ischemic heart/cardiovascular disease patients may benefit from regular eye check-ups, although their exact causal relationship with glaucoma is yet elucidated
5. Sleep Apnea
6. Migraine
7. Underlying eye conditions, e.g. uveitis, history of eye injury

Treatment of Glaucoma

Depending on the type of glaucoma, eye-drops, oral drugs, laser or surgery may be prescribed to control the eye pressure. In some patients with glaucoma in only one eye, prophylactic laser peripheral iridotomy or drug treatment may also be advised for the fellow eye to prevent acute glaucoma.

Glaucoma may cause permanent blindness, which can be prevented by early diagnosis and treatment. Adults over 40 years of age, especially those with the above risk factors, are recommended to undergo eye examination every one to two years to facilitate early detection and prevent deterioration.
Glaucoma is one of the leading causes of blindness in Hong Kong. Out of every one hundred adults above the age of 40, two or more may be affected by glaucoma. If we can diagnose glaucoma early in the course of the disease, blindness can often be prevented.

Leading Cause of Permanent Blindness

Symptoms may not be evident in early glaucoma, therefore the condition is often neglected. By the time the patient realises that he has an eye problem, the disease may already be very advanced. Therefore glaucoma is often nicknamed “the silent killer of vision”.

What Causes Glaucoma?

Within the eyeball, there is a continuous flow of a transparent liquid called “aqueous humour”. The flow of the aqueous humour is analogous to a sink with a faucet turned on at all times. If the flow is too fast or if the drainpipe gets clogged, the pressure within the eye increases. The increased eye pressure will damage the eye and its nerves, leading to poor vision and even blindness.

The diagnosis of glaucoma includes state-of-the-art tests and careful examinations by experienced eye specialists.

Types of Glaucoma

Glaucma can be classified according to the type of onset or underlying etiology as acute or chronic, congenital or acquired, primary or secondary, and normal tension glaucoma or hypertensive glaucoma.

Acute Glaucoma

Patients with acute glaucoma will experience a sudden onset of eye pain, redness, blurred vision and halos. It is usually associated with headache, nausea and vomiting. This is an ophthalmologic emergency, and medical attention should be sought immediately. Oral medication, injections or eye drops should be given in order to decrease ocular pressure as quickly as possible, after which treatment can be administered via laser peripheral iridotomy or other surgical methods.

Chronic Glaucoma

Chronic glaucoma is more insidious. There are no telltale symptoms. Vision deteriorates and the field of vision narrows gradually. Patients are often unaware of their problem until the disease becomes very advanced, by which time most of their vision is lost. Hence glaucoma is nicknamed “the thief of sight”.

Congenital/Acquired Glaucoma

While many patients are first diagnosed with glaucoma after the age of 40, there are also children who are born with a defective aqueous drainage system, resulting in congenital glaucoma. Congenital glaucoma usually presents itself during infancy or early childhood. Patients have large watery eyes which are sensitive to light.

Primary Glaucoma

Primary glaucoma refers to those not caused by systemic diseases (e.g. diabetes mellitus) or underlying eye diseases (e.g. cataract, uveitis).

Secondary Glaucoma

Secondary glaucoma is caused by other underlying eye or systemic diseases, such as hyper-mature cataract, uveitis, eye tumours, diabetic eye disease or long-term use of steroid eye drops. It is vital to treat the underlying eye disease before the secondary glaucoma can be treated.

Normal Tension Glaucoma

Some patients can have symptoms and visual field loss typical of glaucoma even with normal intraocular pressure. This is called “normal tension glaucoma” in which the optic nerves apparently cannot withstand the “population-normal” level of eye pressure. Thus, more investigations are usually required for diagnosis.