

## **RISK FACTORS FOR GLAUCOMA**

Glaucoma is quite common in the Indian population. Blindness due to glaucoma in India is quoted from 0.5% to 4%. Nearly 12% of glaucoma patients are blind in India. It is more common in patients suffering from diabetes, hypertension and other vascular diseases. The risk of developing glaucoma increases after 40 years of age.

Refractive error also predisposes to glaucoma. Myopic patients have a higher risk to develop primary open angle glaucoma and hypermetropic patients may develop angle closure glaucoma.

Family history is the single most important risk factor. The type of glaucoma, prognosis and response to treatment may be similar amongst relatives.

## **RELATIONSHIP OF PRESSURE TO GLAUCOMATOUS DAMAGE**

There are various factors that play a role in causing optic nerve damage in glaucoma.

A high intraocular pressure (IOP) is the single most important risk factor. If the baseline pressure (eye pressure at the time of diagnosis) is higher than risk of developing glaucoma and worsening is glaucoma is higher. The pressure above which glaucomatous damage occurs is different for each eye. In rare cases there may be glaucomatous damage even when the intraocular pressure remains in the so-called 'normal' range, (Normal Tension Glaucoma).

In patients whose IOP fluctuates more than 8 mm Hg of in a day, his chances of glaucoma worsening is more than whose IOP fluctuates less than 5 mm Hg in a day.

### **Glaucoma Relationship with Age:**

The risk of losing eye sight due to glaucoma increases with duration of disease. After 20 years of glaucoma initiation, 27% of people have chance of becoming blind in at least one eye and 15% of people have possibility of getting both eye involved and becoming completely blind. As age increases, glaucoma progresses also more rapidly than younger patients. The 10 year increase in age is associated with 40% increase in visual field loss.

**RACE:**

African tends progress faster than other races. The risk of worsening in Indian is same as other Asian and Caucasian populations.

**Family history:** It is very important risk factor. If you have family history (first degree blood relatives) than your risk of developing glaucoma is at least 5 times more than people who do not have family history. In family history, the glaucoma among siblings increases the risk to nearly 10 times.