

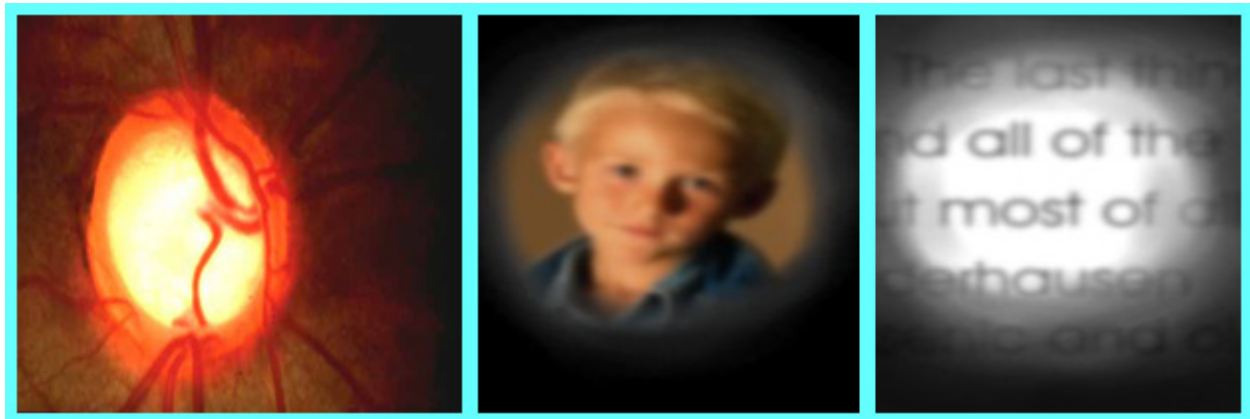


## Ajay Kr Bhootra

B.Optom, DOS, FAO, FOAI, FCL~~I~~, ICLEP, FIACLE (Australia)  
Diploma in Sportvision (UK)  
Ex CEO and DEAN: Krishnalaya School of Optometry

### Glaucoma – A silent thief of vision

Glaucoma is one of the most common causes of blindness. It occurs because aqueous humor does not drain normally or there is an excess formation of aqueous. The result is observed as increase in intra ocular pressure within the eye. Some of the most commonly known reasons that may be referred are family history, systemic vascular disease, uveitis, use of steroid pharmaceutical agents, diabetes. Optic nerve damages gradually. Since optic nerve is the key to transmission of information from eyes to brain, glaucoma results in gradual and irreversible loss of vision and eventually blindness. Early glaucomatous changes can be subtle. Hence, in most cases patient may not be symptomatic. He may only come to know when he undergoes eye examination with an eye care practitioner.



### Vision Disturbances

- Blurred vision which is gradual.
- Photophobia and intermittent pain

- Seeing halos around light,
- Central visual acuity is generally unaffected until the end stage
- Total visual loss in end

## **Visual Field Loss**

- Early glaucomatous visual field defects include para central scotomas, arcuate scotomas
- Progressive visual field loss from these areas occurs as the disease worsens.
- Reduced peripheral vision.

## **Diagnosis of Glaucoma**

The criteria for making a diagnosis of glaucoma involve intraocular pressure measurement, Gonioscopic examination of the anterior chamber angle, stereoscopic optic nerve evaluation and threshold visual field assessment. Intraocular pressure above 21 mm of Hg should be considered suspicious for glaucoma.

## **Treatment of Glaucoma**

The medical treatment is aimed to reduce the increased IPO and to ensure neuro-protection. If medical treatment fails surgical intervention may be required. However, loss of vision and loss of visual field cannot be regained.

## **Low Vision Aids**

When visual disturbances manifest, normal spectacle does not improve visual acuity. Under such condition the patient may be referred for low vision aids. The following low vision aids works in most cases:

- CCTV or Max are useful because it allows increase of contrast and brightness along with magnification,
- CPF are beneficial in reducing glare
- Reverse telescopes can be used to enhance visual field,
- Flashlight can be helpful for night travel,
- Long cane also helpful for travel during end-stage

### ***Acknowledgement:***

I am thankful to Dr Sambuddha Kundu, *Medical Vitreo Retinal Fellow and Phaco Surgeon*, who spent his invaluable time to review this article.

***References:***

Low Vision Aids Practice, *By Ajay Kr Bhootra*

Ophthalmic Diagnosis and Treatment *By Myron Yanoff, MD*

Essentials of Low Vision Practice *By Richard L. Brilliant, OD, FAAO*

\*\*\*