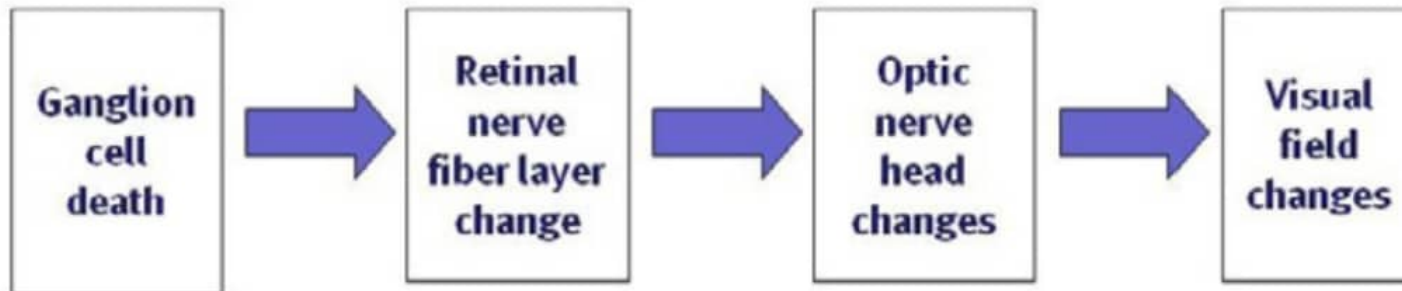


GLAUCOMA

Definition: an optic neuropathy with characteristic optic nerve head and nerve fiber layer changes

PROGRESSION



GLAUCOMA: TYPES

- Primary open-angle (POAG)
- Angle-closure
- Congenital
- Childhood
- Secondary

GLAUCOMA: GROUPS AT RISK

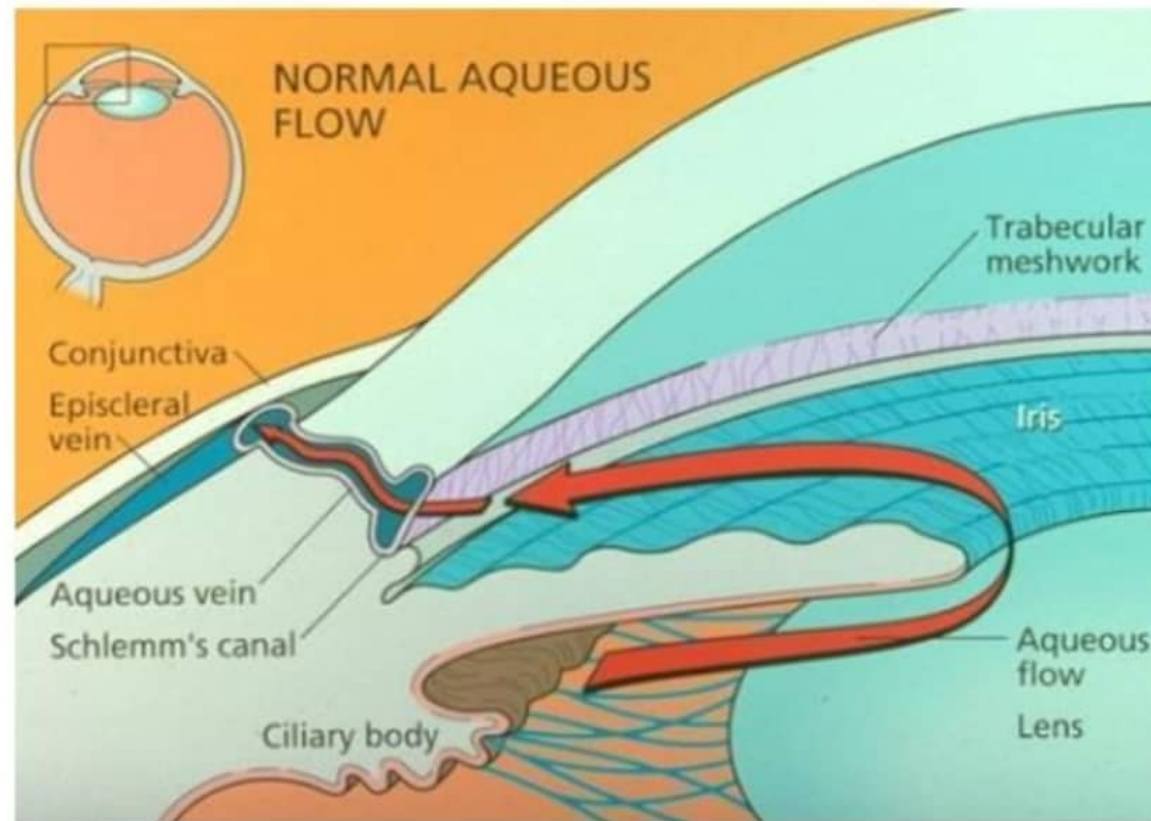
- Elderly
- African-Americans
- Individuals with
 - Elevated IOP
 - 1st-degree relatives with glaucoma
 - High myopia?
 - Diabetes?

GLAUCOMA: OPTIC NERVE HEAD CHANGES

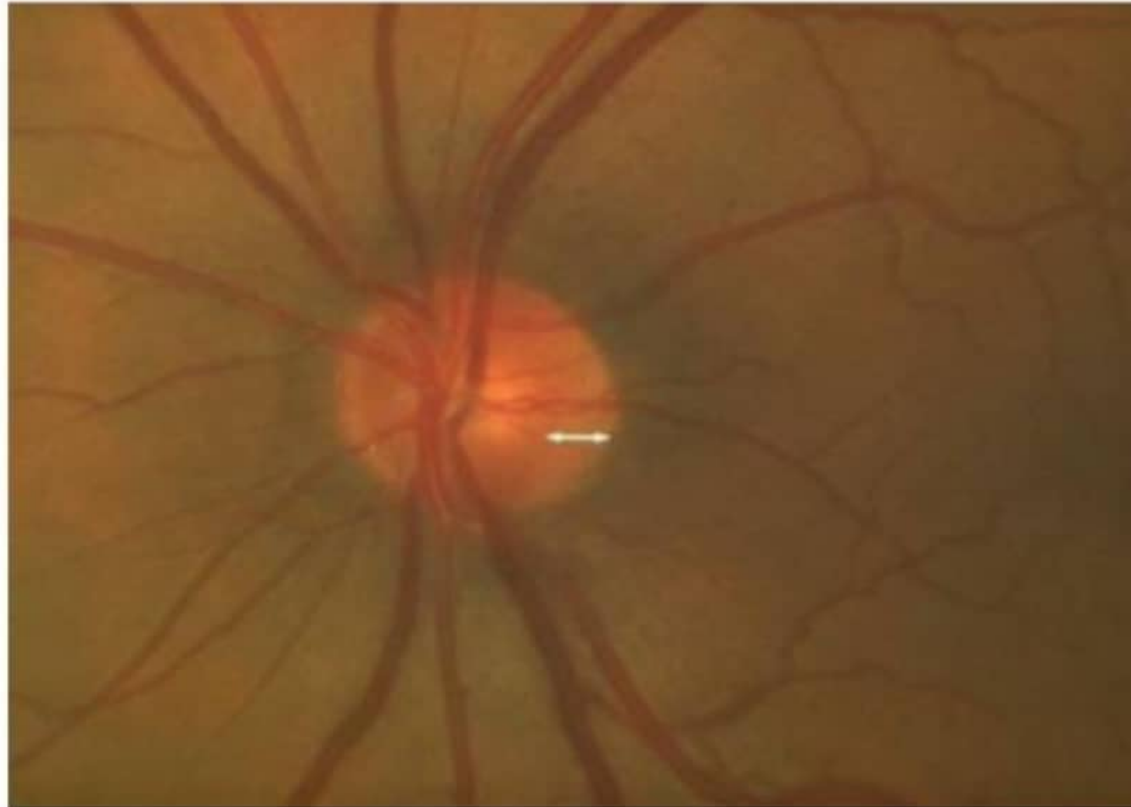
- Increased size of the cup
- Thinning of disc rim
- Progressive loss of neural rim tissue
- Disc hemorrhages
- Loss of nerve fibers

POAG: CHARACTERISTICS

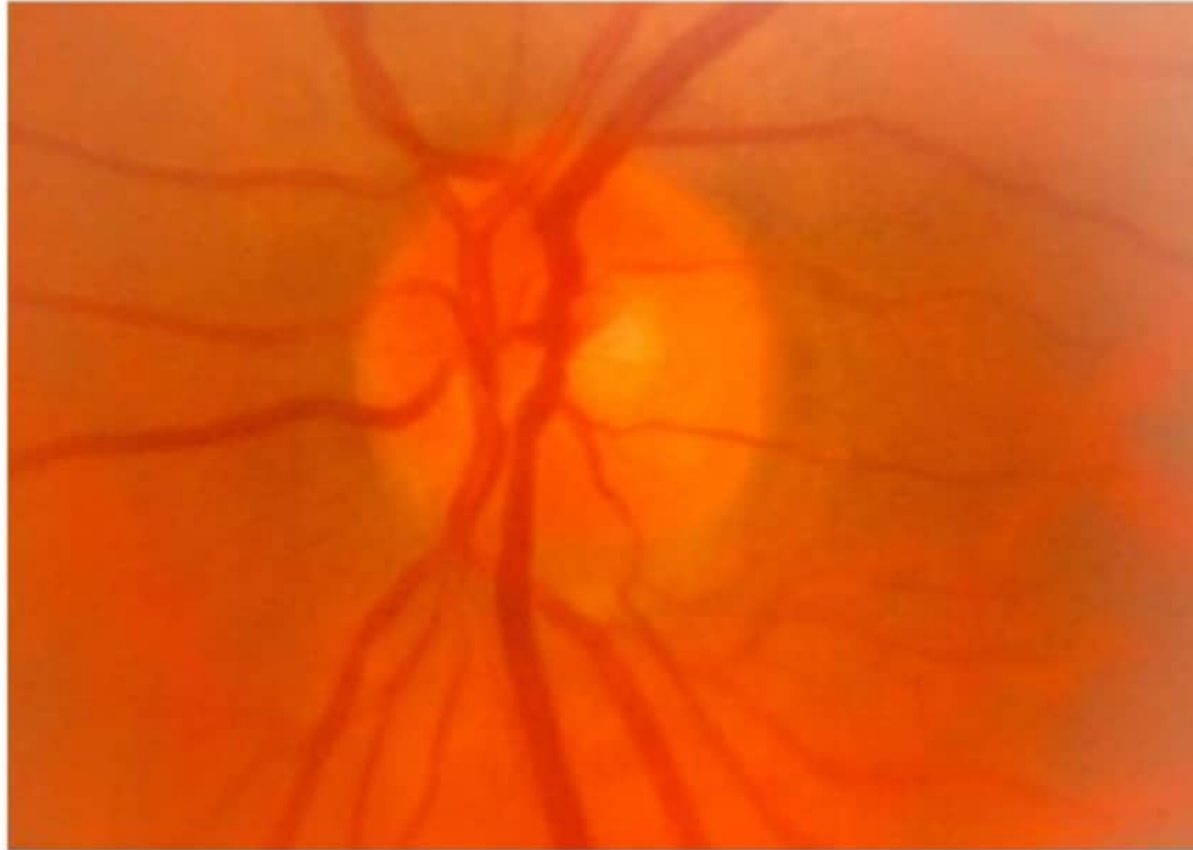
- Most common type of glaucoma
- Bilateral but not always symmetric
- Characteristic optic nerve and visual field damage
- Adult onset
- Open, normal-appearing anterior chamber angles
- Absence of secondary causes



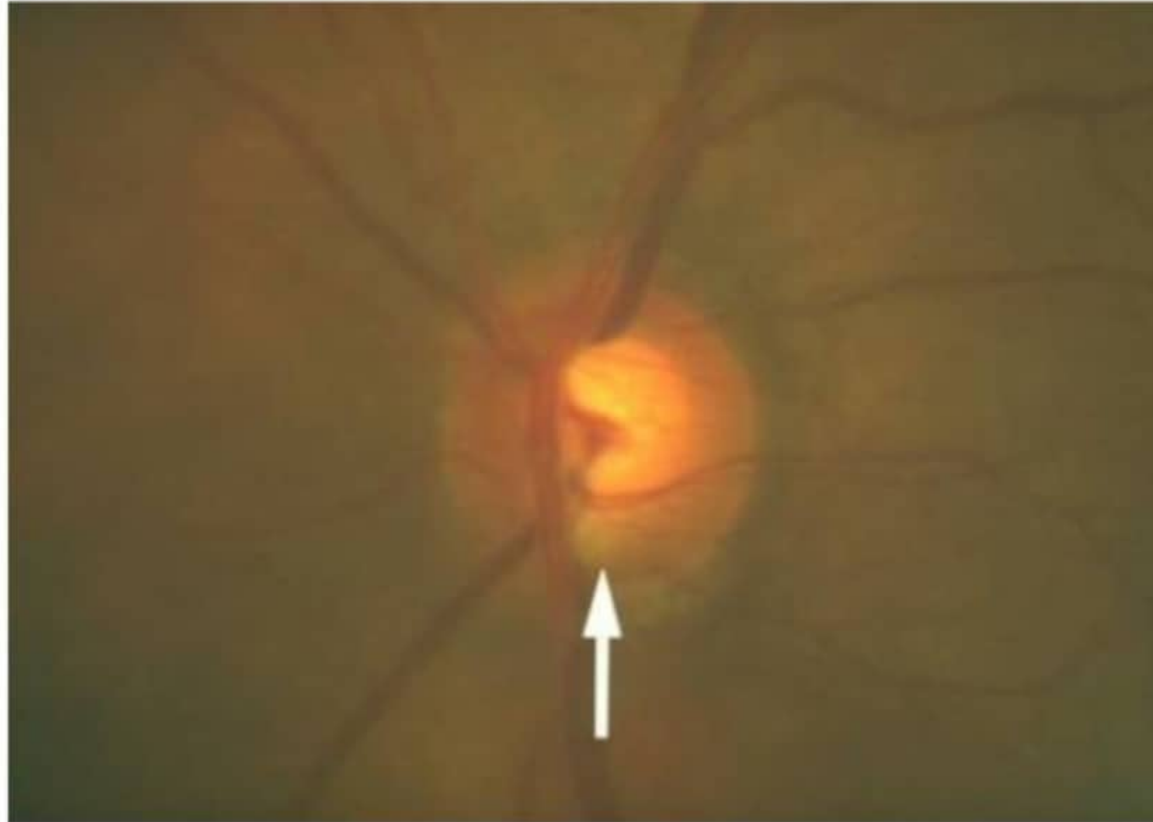
Screening for POAG =
IOP measurements
+
Optic disc evaluation
+
Visual field testing



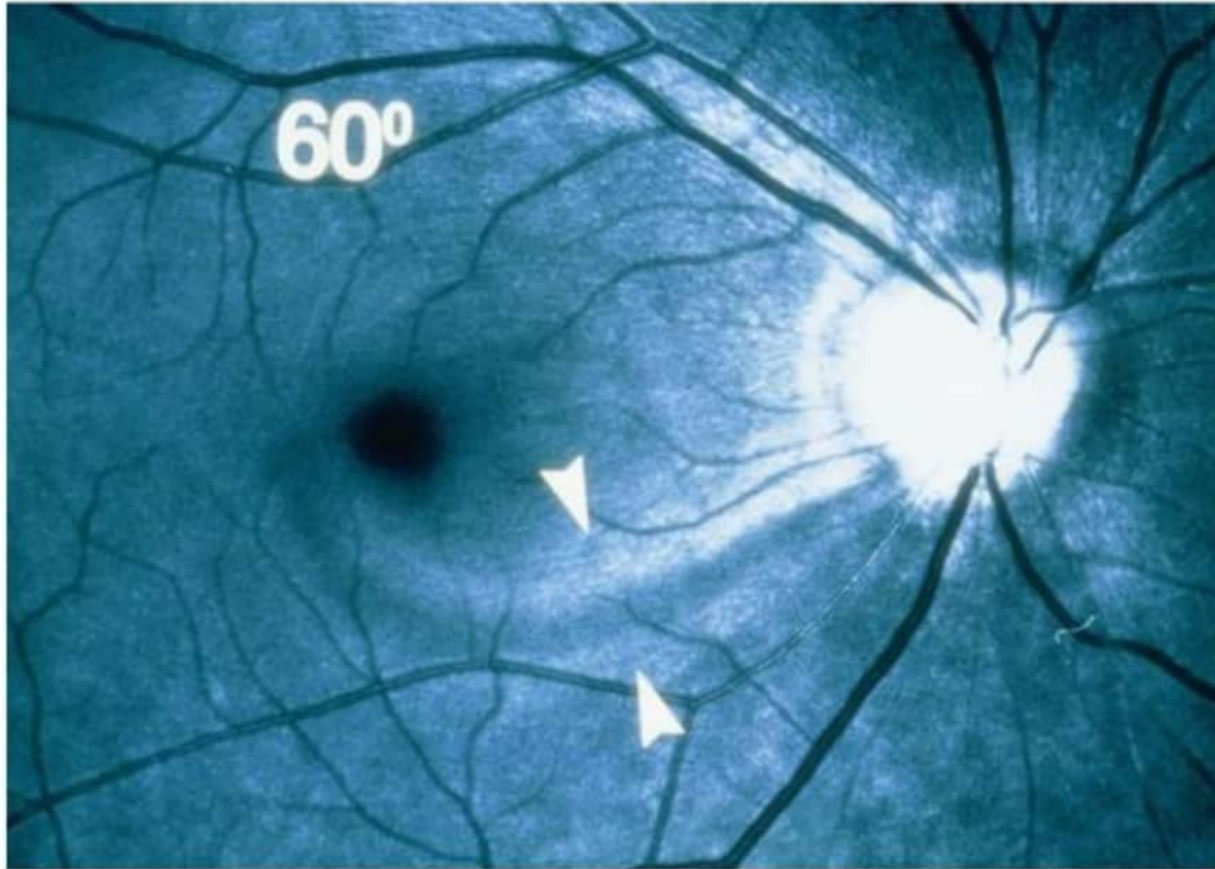
Healthy neuroretinal rim



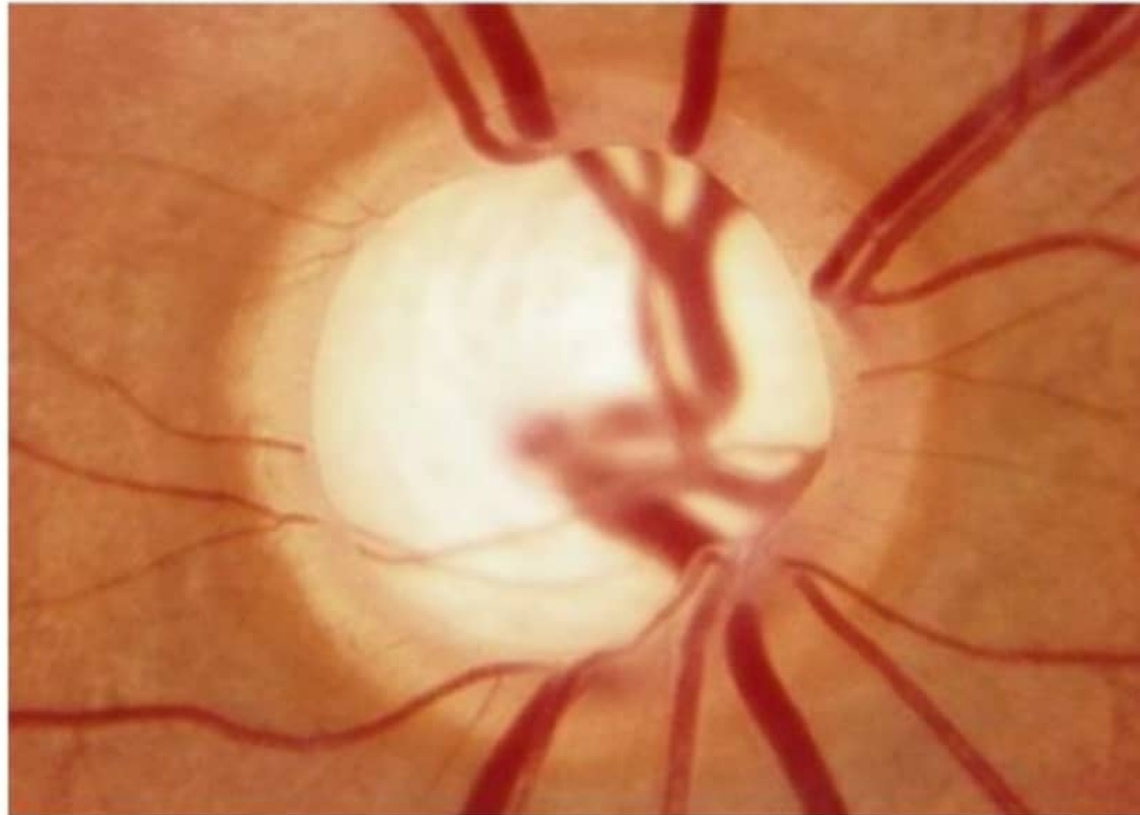
C:D ratio = 0.3



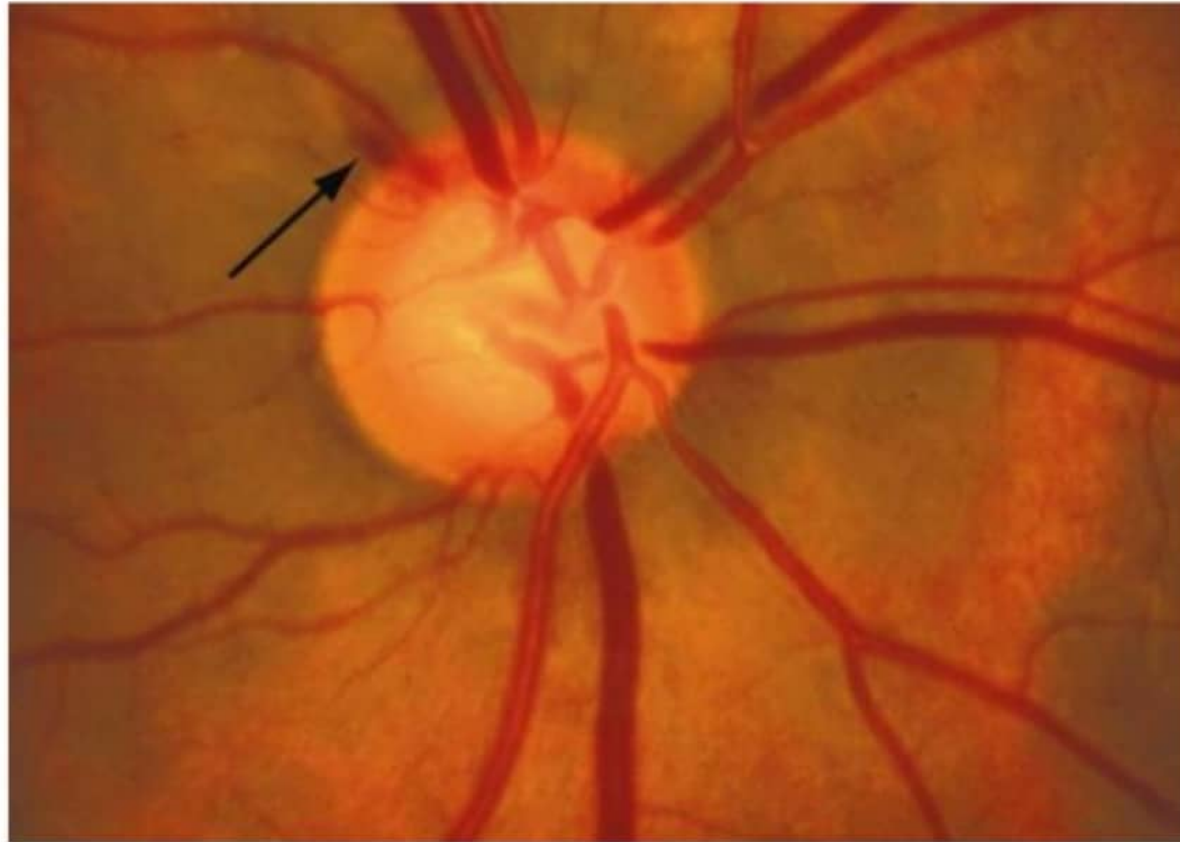
Thinning neuroretinal rim, elongated cup



Groove or wedge defect in nerve fiber layer



Extensive glaucomatous damage



Flame-shaped disc hemorrhage



Nasal visual field and midperipheral vision loss

**Glaucoma medications
decrease intraocular pressure
by
decreasing aqueous production
or
increasing outflow.**



Inhibiting systemic absorption of eye drops by occluding lacrimal puncta