

# Glaucoma...don't Cheat on me!!!

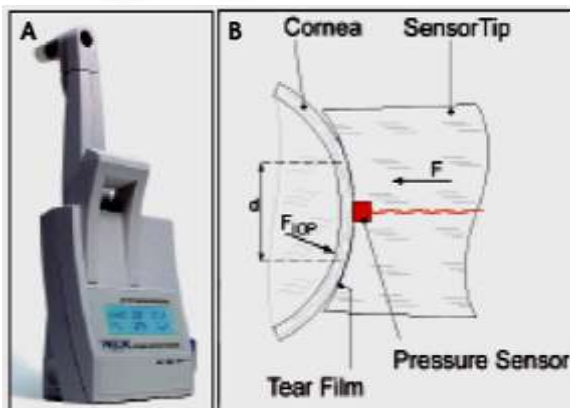
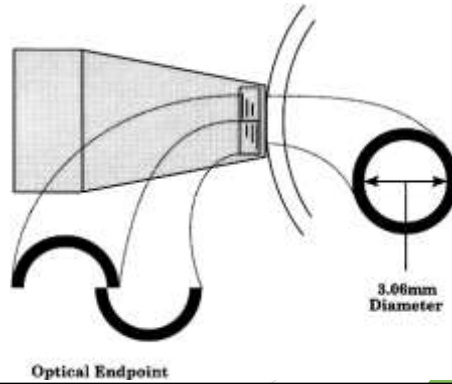
**MOHSEN N. SALEM. MD**

Professor Of Ophthalmology, Cairo University



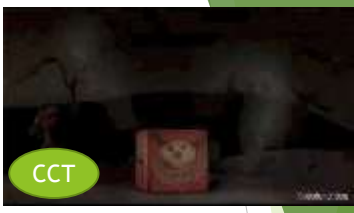
# Intra-Ocular Pressure

A lot of methods..... A lot of fallacies.....

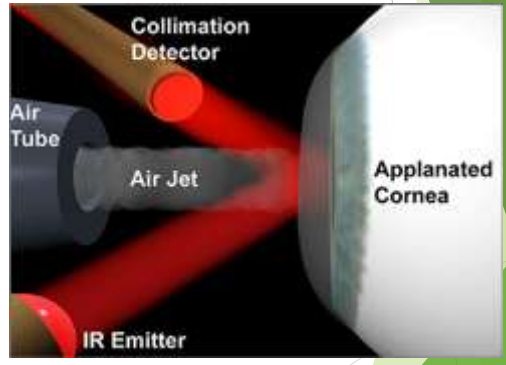




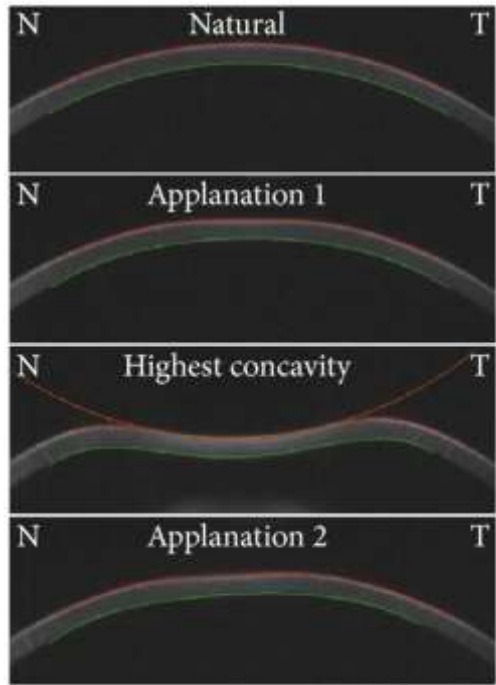
# Ocular Response Analyzer.....



IOP<sub>cc</sub>



Corvis.....



OCULUS Corvis® ST



## Visual Field



- ▶ 30-50 % structural loss of GCC → functional affection

Different machines..... many fallacies.....

## Kinetic Perimeter



## Static perimeters.....



Octopus Perimeter



Humphrey Perimeter

## Different tests.....

### Improvements

- ▶ Yellow blue
- ▶ SITA standard
- ▶ SITA fast
- ▶ STAT Pac
- ▶ GHT
- ▶ FDT

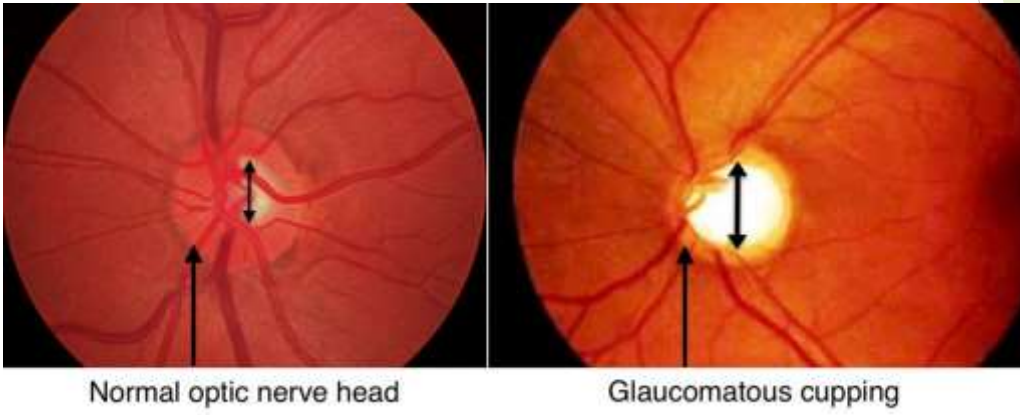
### Drawbacks

- ▶ Subjective
- ▶ Not always reliable
- ▶ lengthy
- ▶ Many fallacies
- ▶ Not able to detect minute progression
- ▶ Neither early nor late or even intermediate!!!!

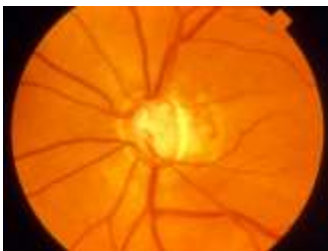
## Optic nerve head.....

### Structural damage:

- Clinical examination
- Stereo-photography



## Types of optic disc cupping



Senile sclerotic



Focal ischemic



Diffuse concentric enlargement



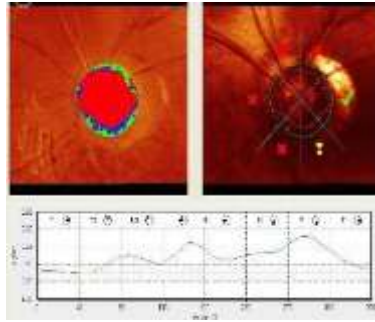
Myopic cupping

## Nerve fiber layer atrophy.....

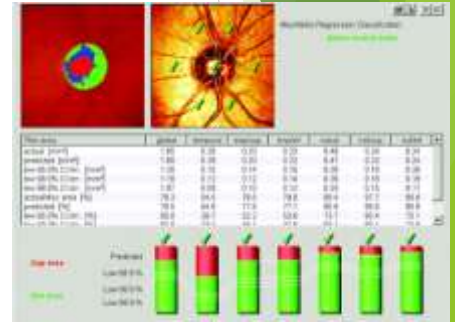
Red free filter



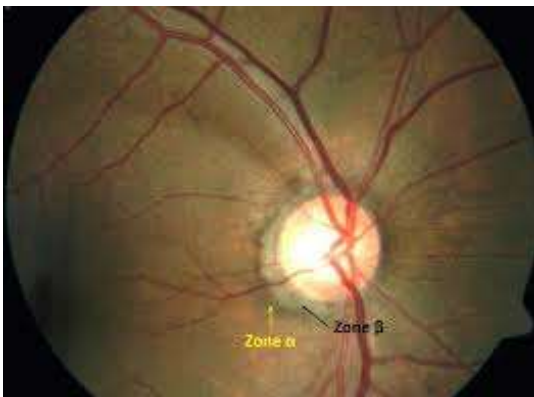
HRT



SLO



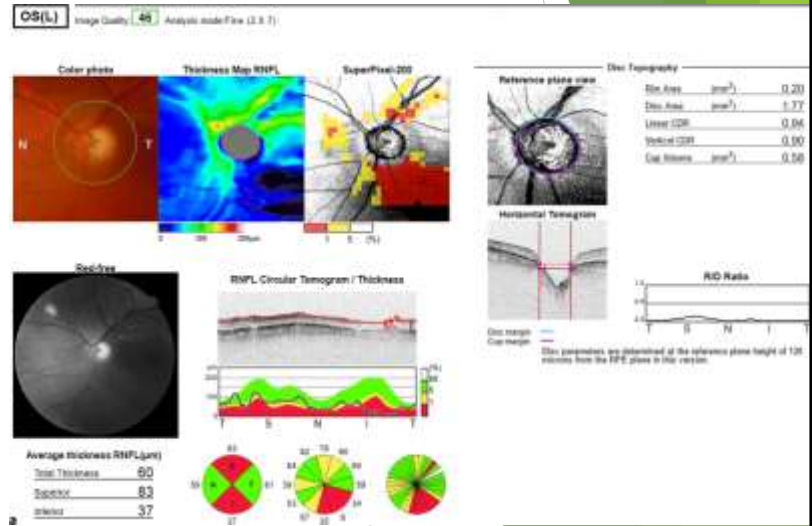
## - $\alpha$ & $\beta$ Zone peripapillary atrophy.....





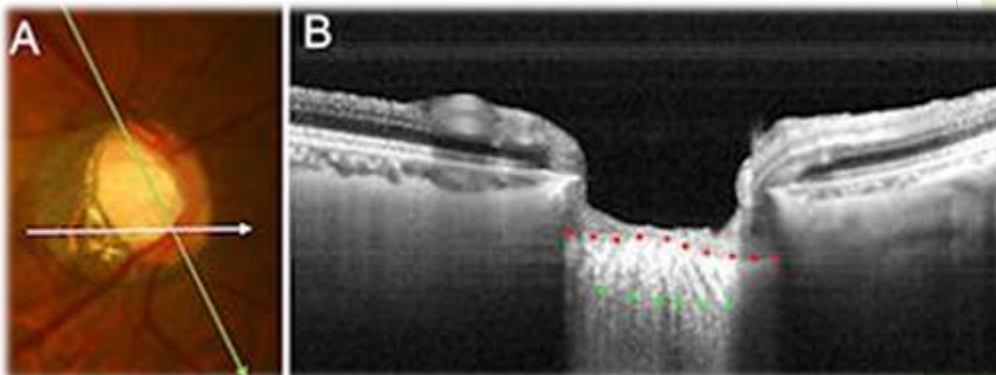
## Optical coherence tomography in glaucoma.....

- ▶ Optic disc assessment (vertical cupping, linear cupping, cup volume and rim area)
- ▶ Nerve fiber layer thickness analysis in the four quadrants
- ▶ Ganglion cell complex analysis



## Swept source OCT in glaucoma....

- Lamina cribrosa assessment.....



## OCT angiography in glaucoma.....

