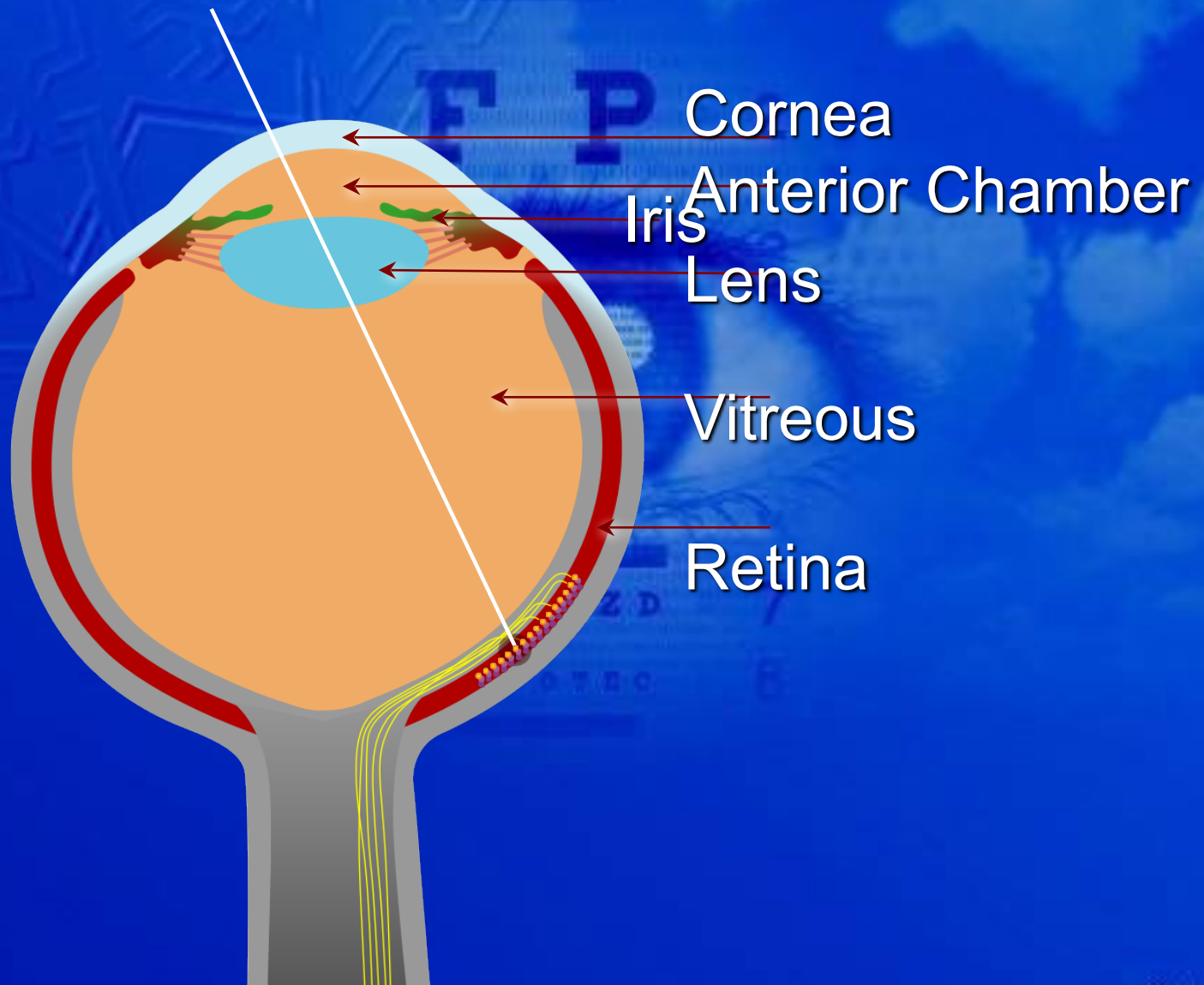




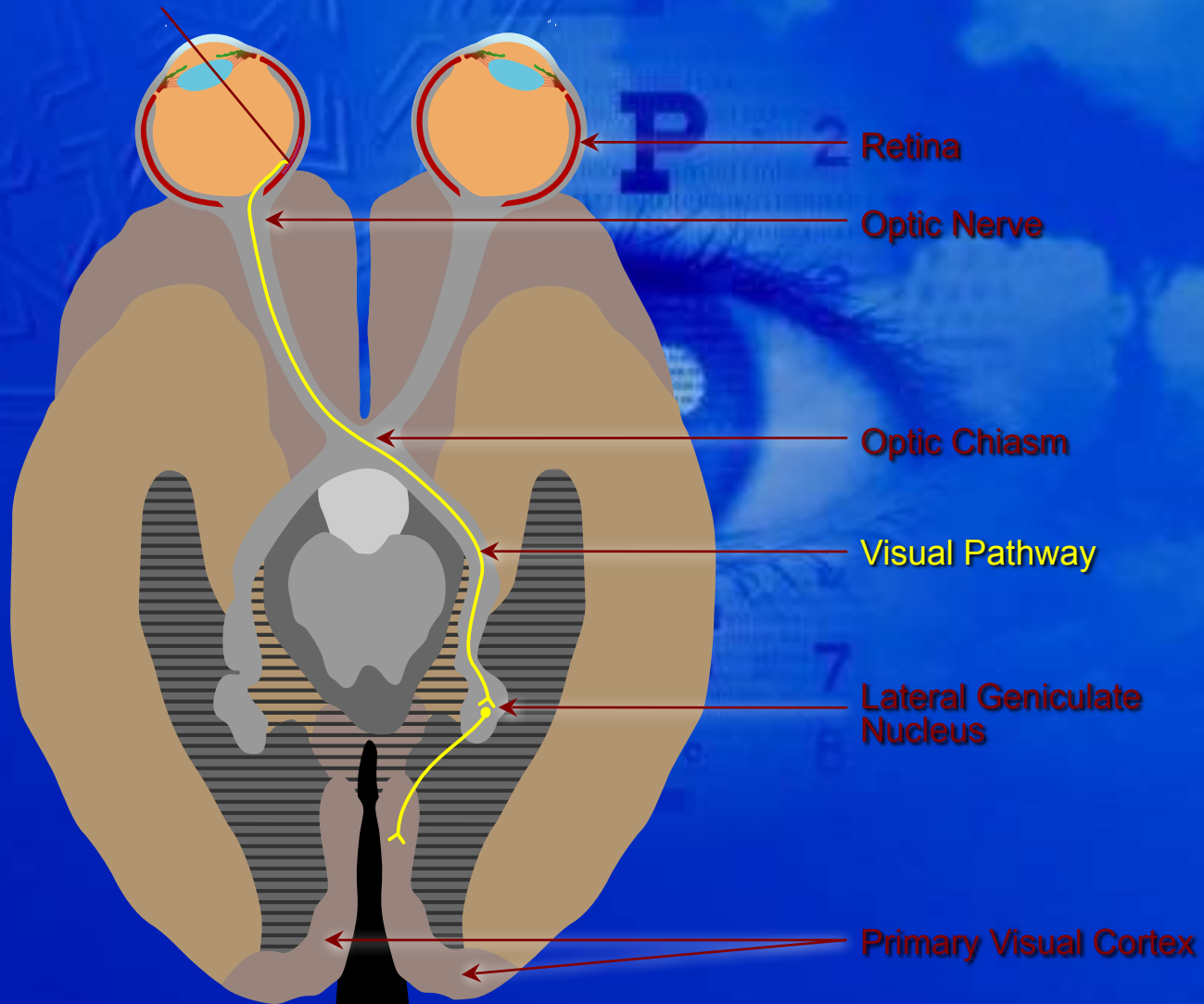
# Chronic Visual Loss

E 5  
F P 2  
FELOPZD 7  
DEPOTEC 8

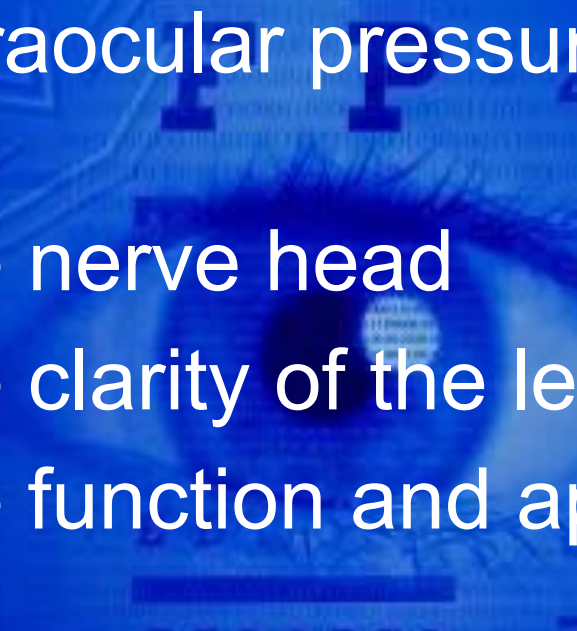
# The Visual Pathway



# The Visual Pathway



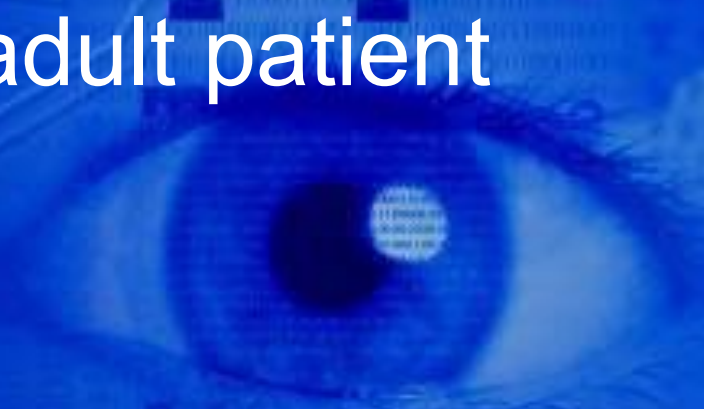
# CHRONIC VISUAL LOSS

1. Measure intraocular pressure with a tonometer
  2. Evaluate the nerve head
  3. Evaluate the clarity of the lens
  4. Evaluate the function and appearance of the macula
- 

# CHRONIC VISUAL LOSS

Causes of slowly progressive **visual loss** in an adult patient

1. Glaucoma
2. Cataract
3. Macular degeneration
4. Diabetic retinopathy



# GLAUCOMA



- \*A major cause of blindness. African Americans
- \*Often asymptomatic; in early stage (peripheral vision)
- \*Damage is irreversible
- \*Effective treatment is available

# TYPES OF GLAUCOMA

**Open Angle**

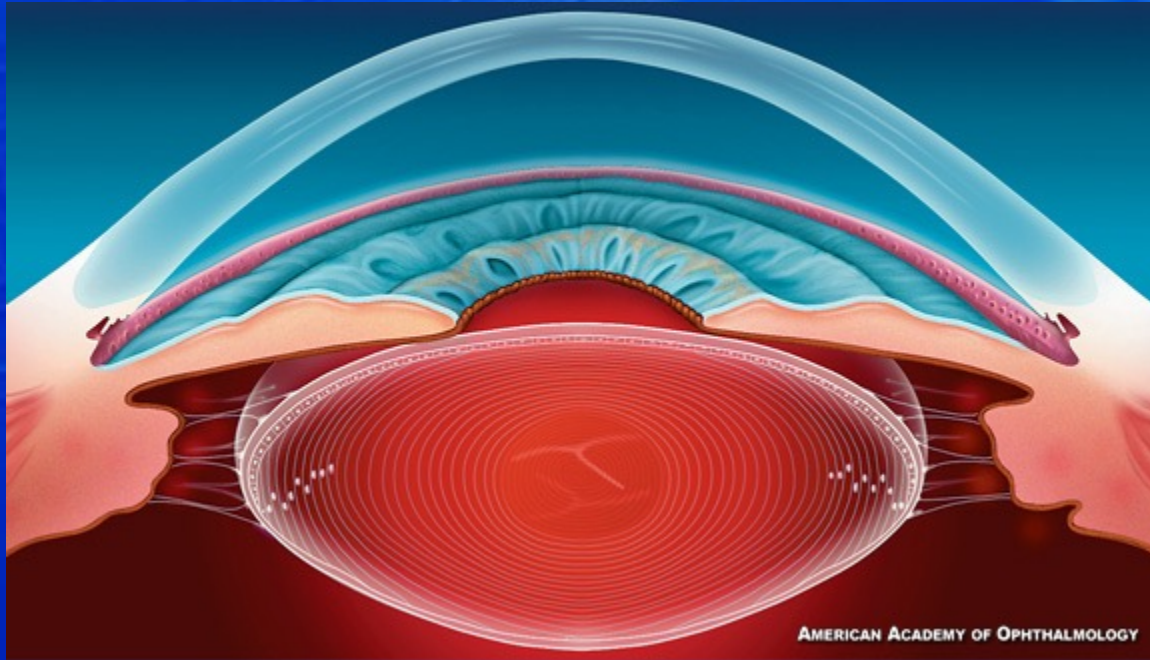
**Closed angle**



F P 2

FELOPZD 7

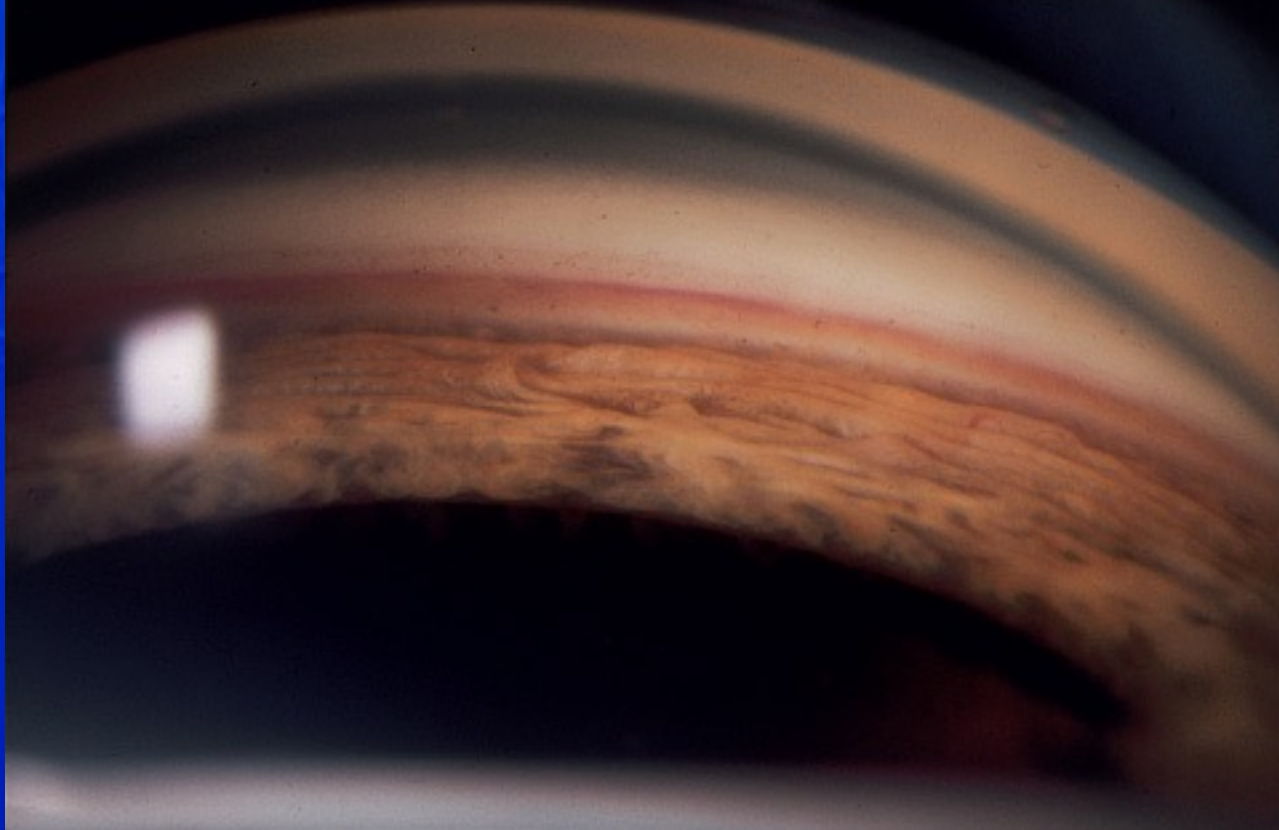
DEPPOYEO 8

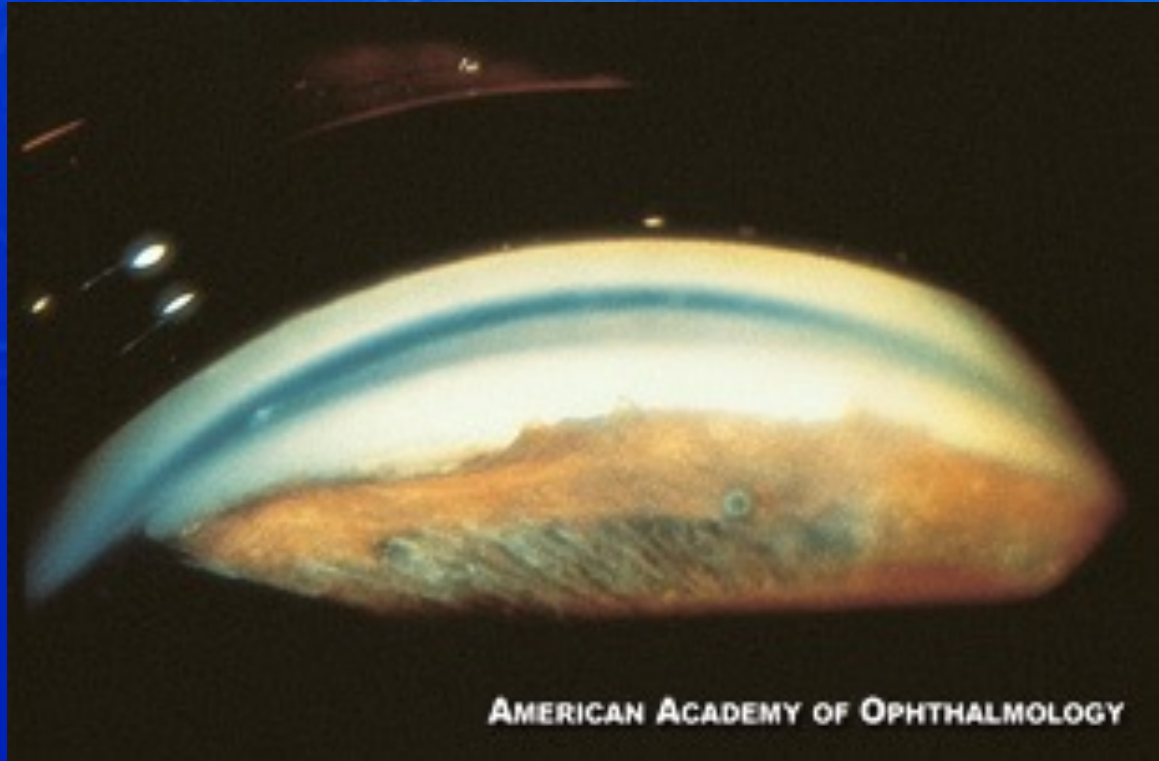


AMERICAN ACADEMY OF OPHTHALMOLOGY



AMERICAN ACADEMY OF OPHTHALMOLOGY

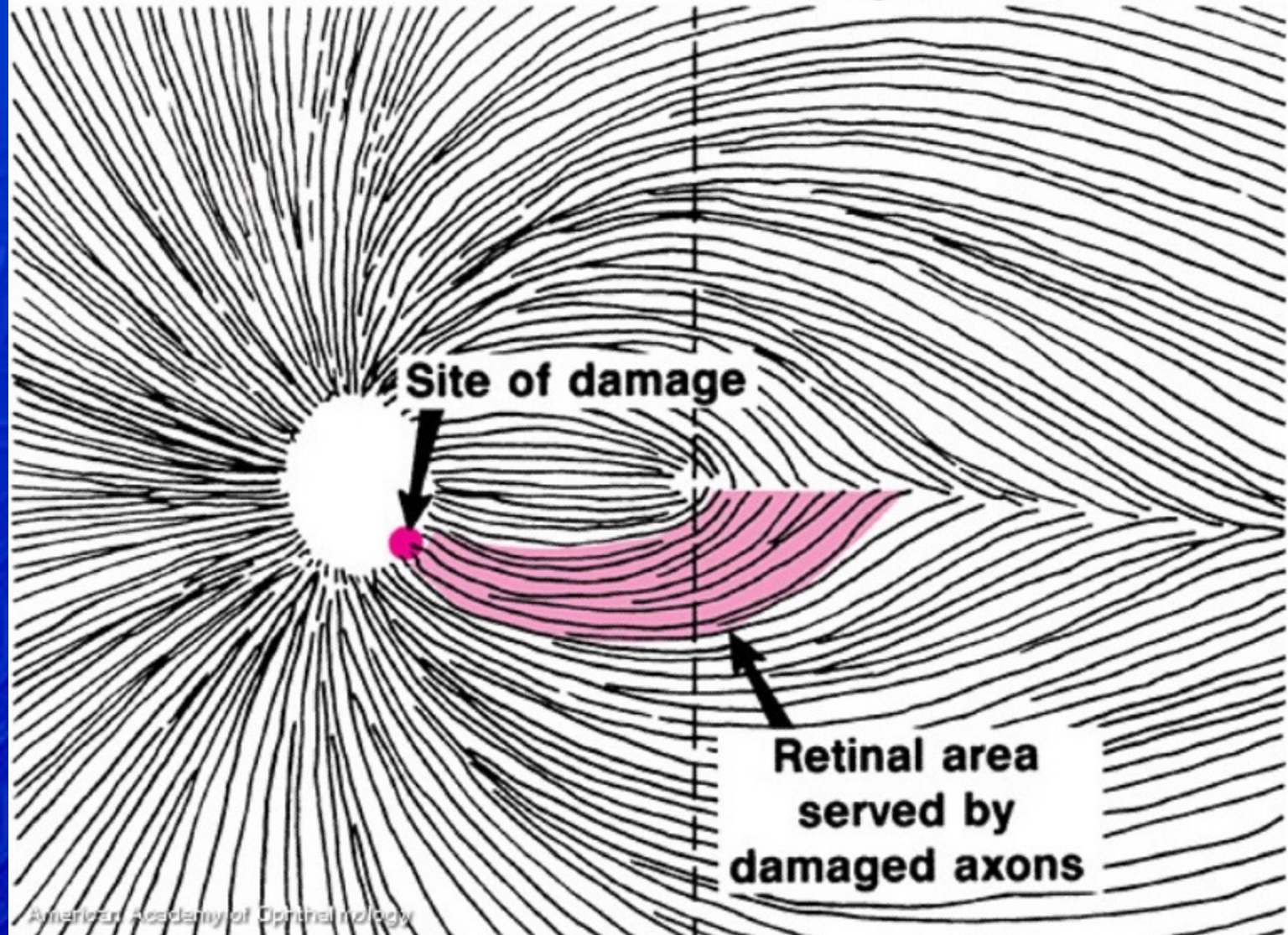


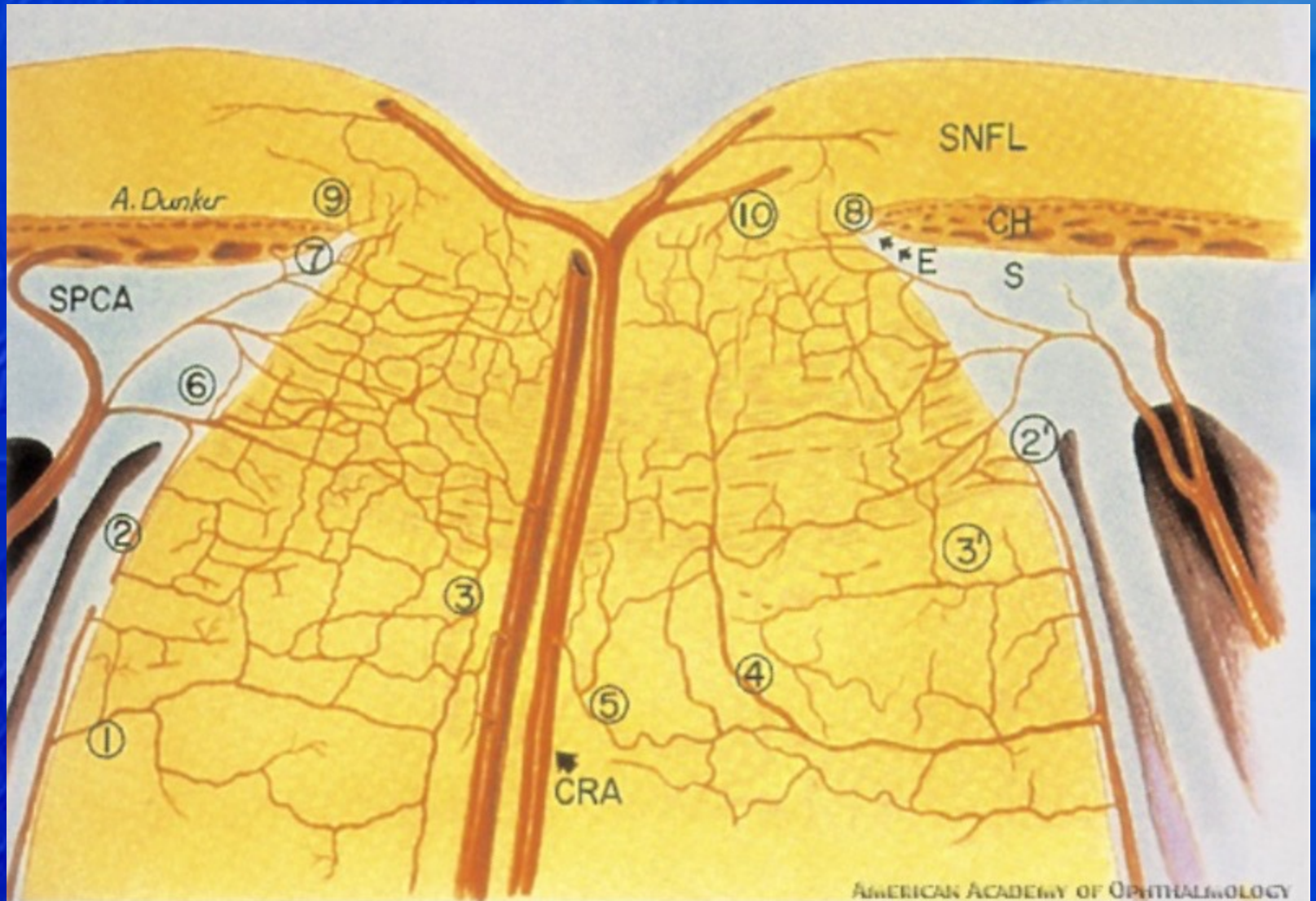


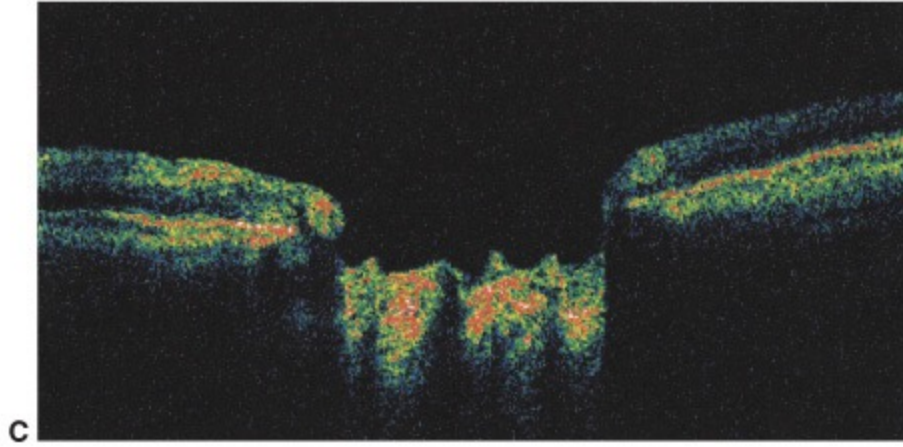
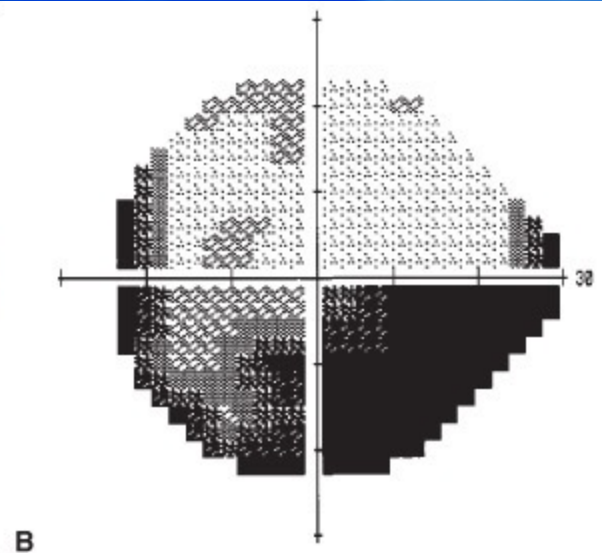
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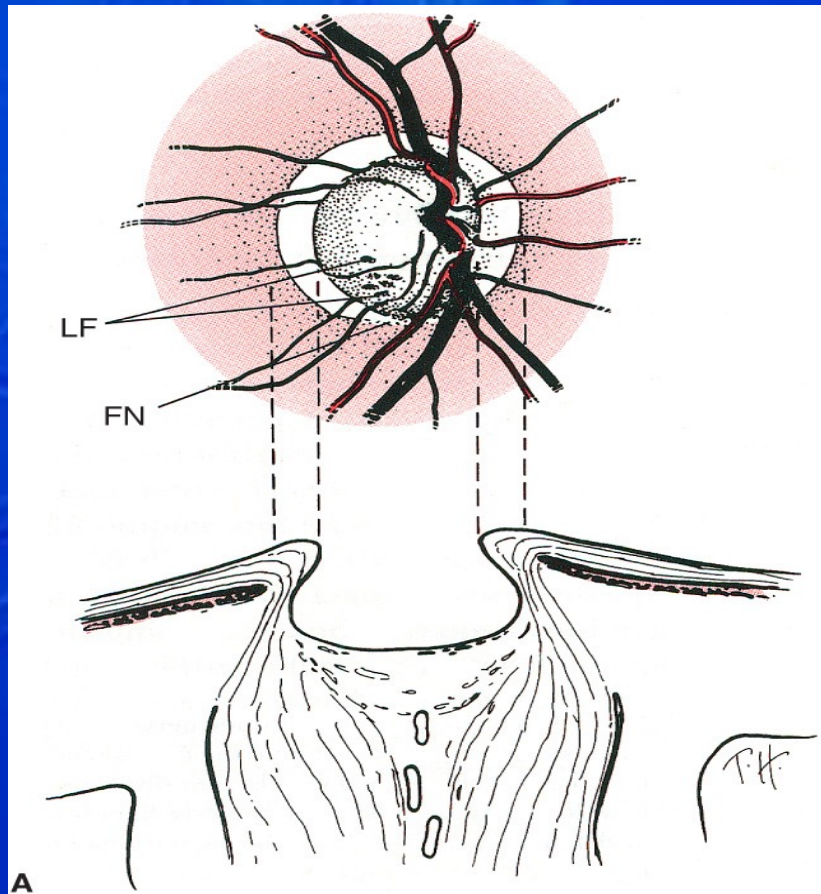
**Nasal retina**

**Temporal retina**









# CATARACT

Opacity of the lens



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# CATARACT

## Causes

Age

Trauma

Systemic diseases

Myotonic dystrophy

## Medications

Steroids

Chlorpromazine

Miotics





# CATARACT

## Classification

### 1-morphologic

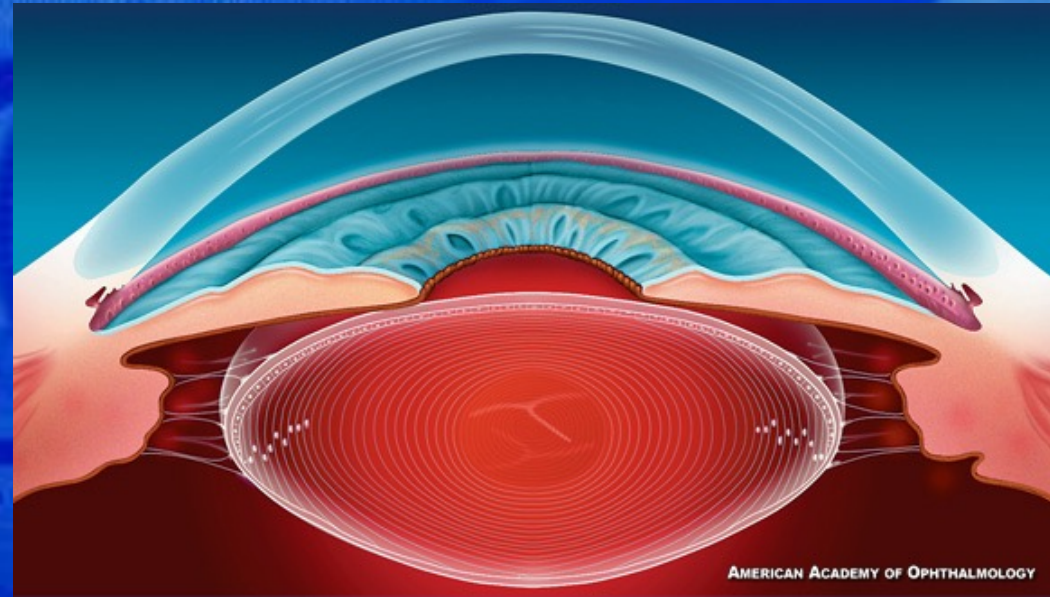
nuclear, subcapsular,  
cortical

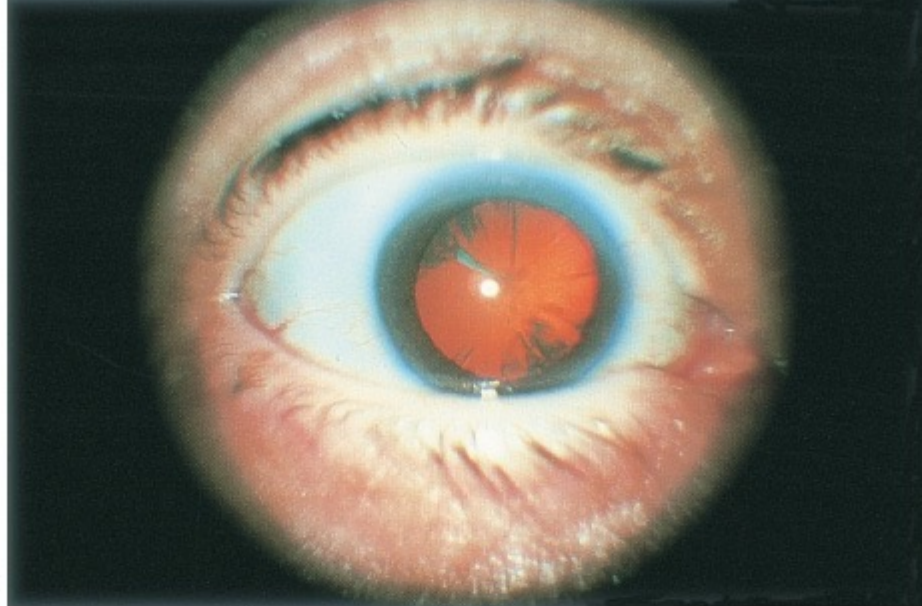
### 2-maturity

immature, mature,  
hyper mature

### 3-age of onset

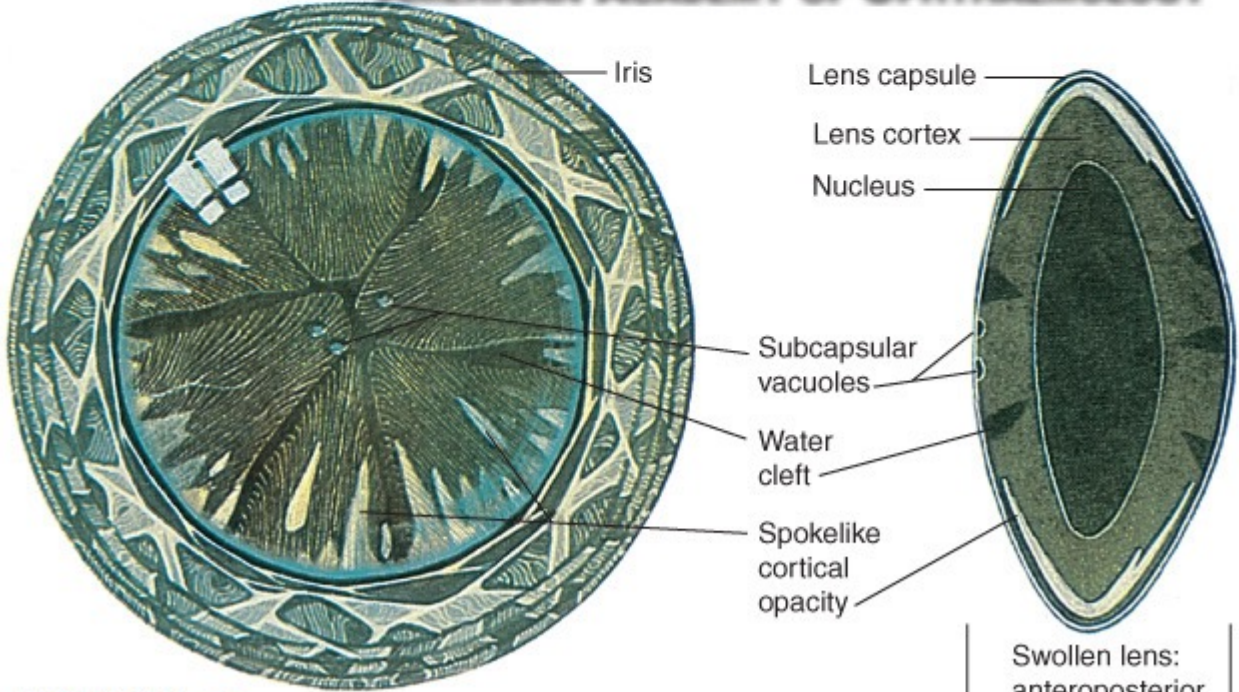
cong, infantile, senile





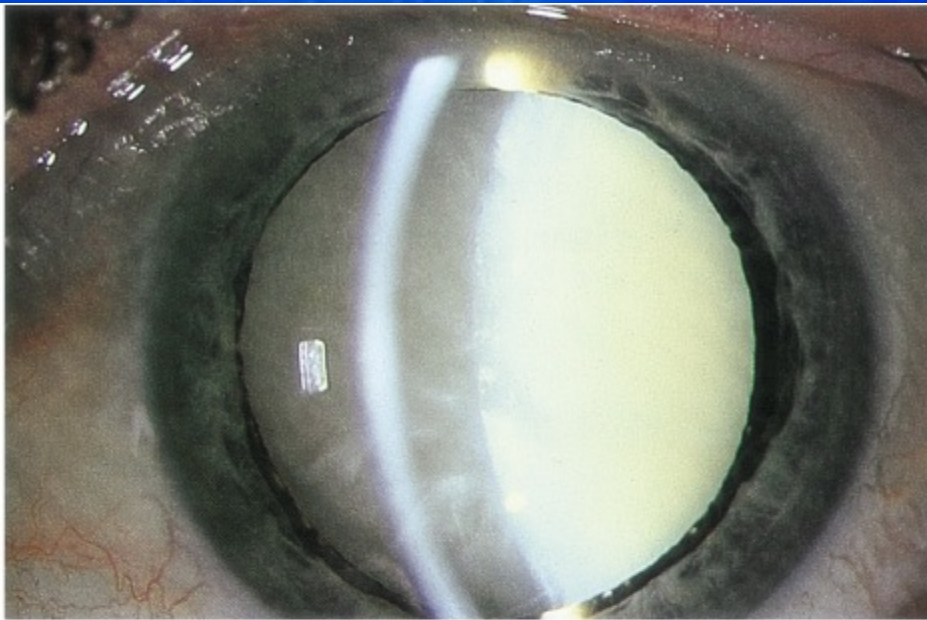
A

AMERICAN ACADEMY OF OPHTHALMOLOGY

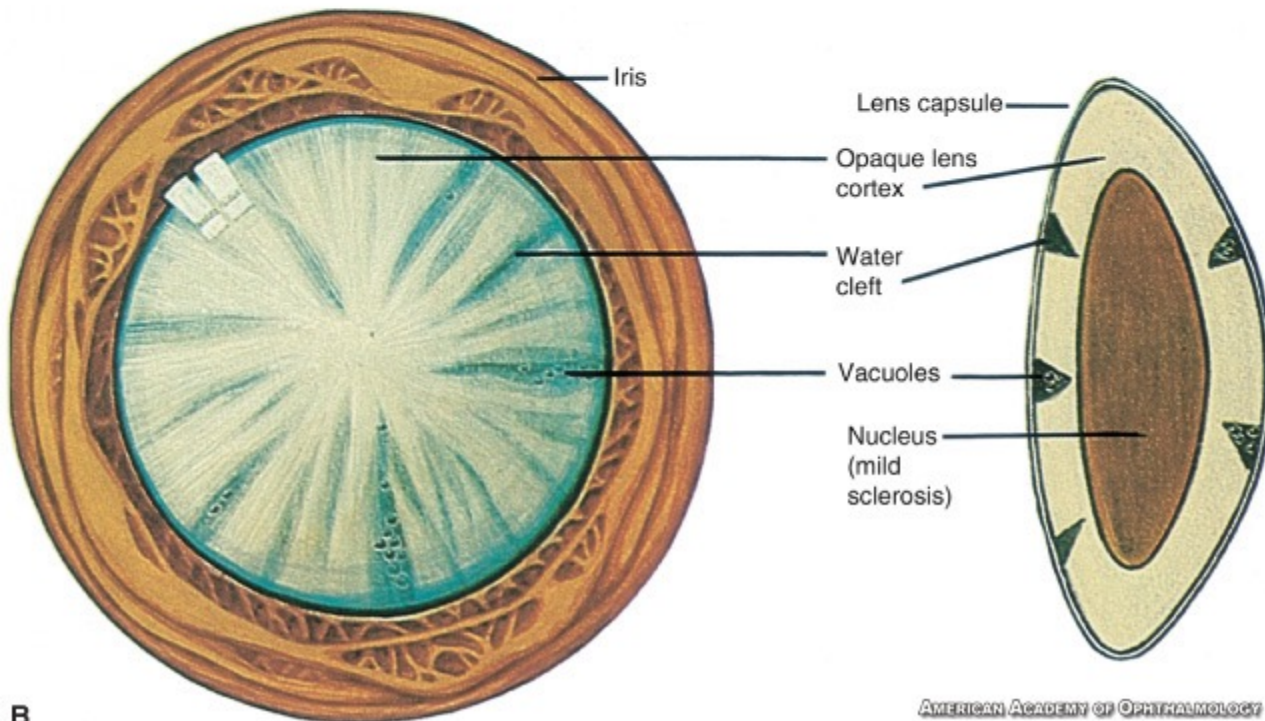


JOHN A. CRAIG, MD  
© CIBA

B

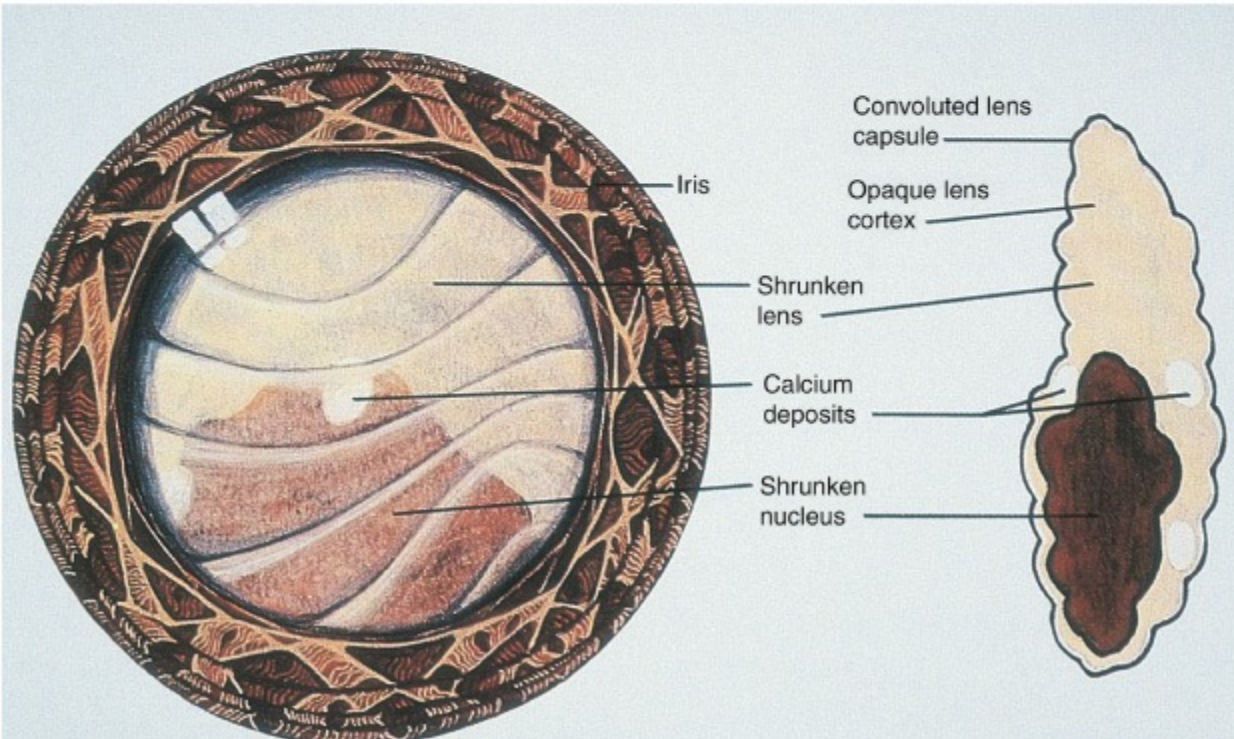


A



B

A



# Congenital Cataract

Hereditary 1/3

Metabolic  
Syndromes

down syndrome, trisomy 13 & 18

Intrauterine infection

Rubella, toxo, cmv



# Management of Cataract

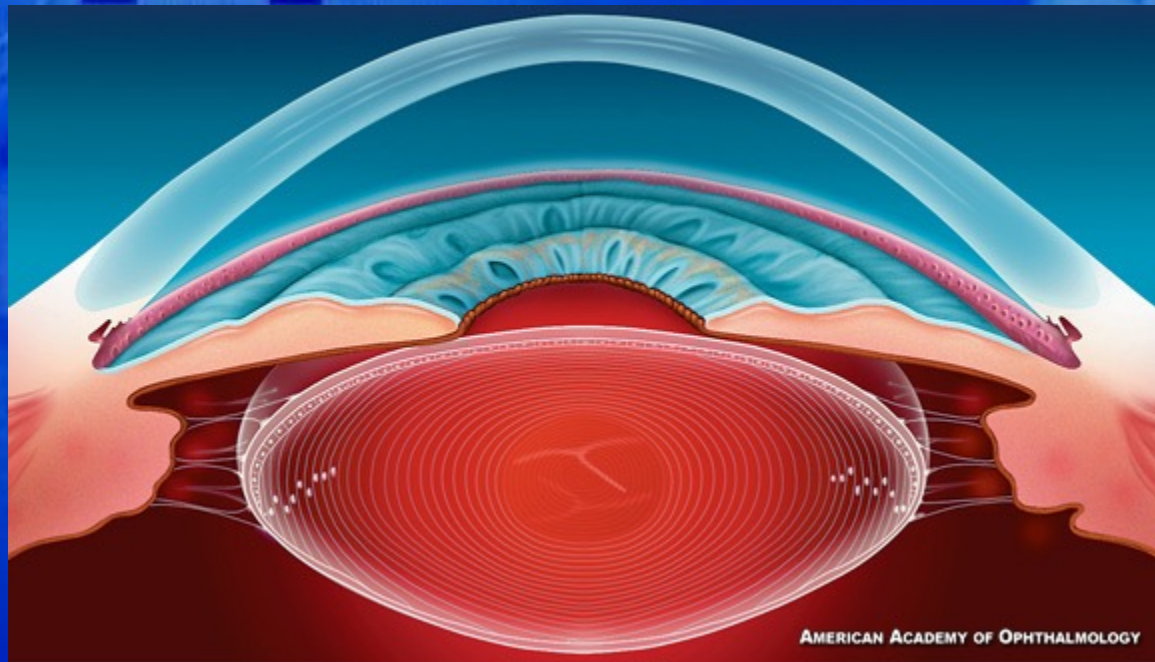
Only surgical

ICCE

ECCE

ECCE IOL

PHACO IOL





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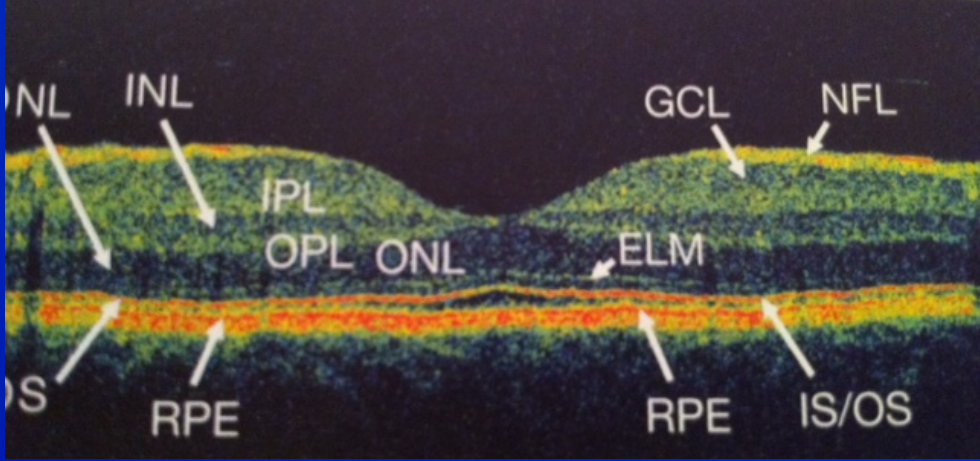
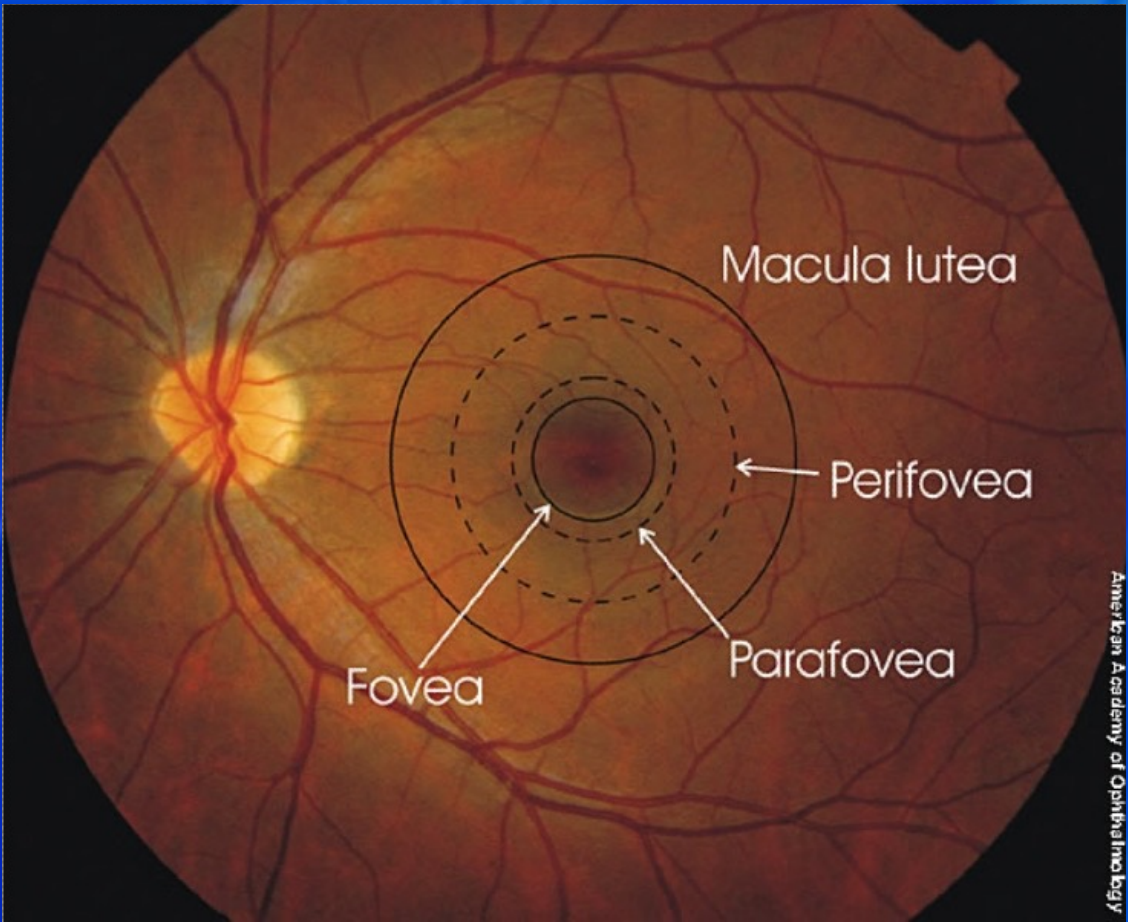
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# Macular Degeneration



# Macular Degeneration

- **Risk Factors**

- Age

- Race

- Gender

- Genetics

- Smoking

- High Blood Pressure

- High Cholesterol

- Unhealthy diet and Obesity

- Ultraviolet (UV)



# Macular degeneration

## Types

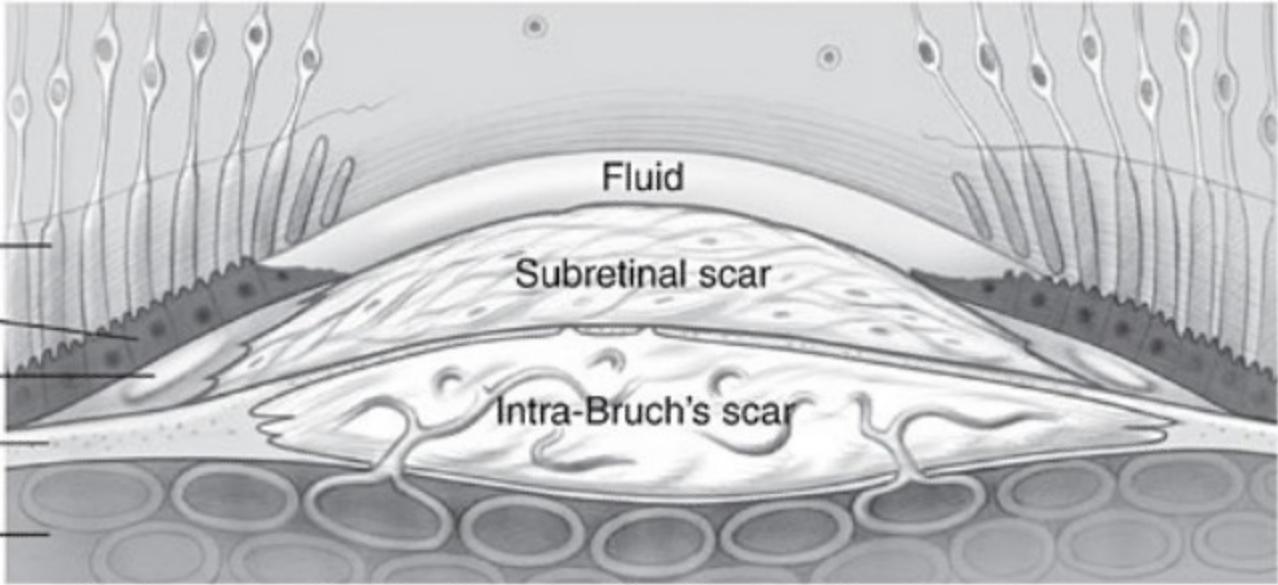
Dry type: slow progressive atrophy of RPE and photoreceptors

Wet type: RPE detachment and choroidal neovas.





Photoreceptor layer  
RPE  
Fluid  
Bruch's membrane  
Choroid



**B**

# Macular degeneration

## Tests for macular function

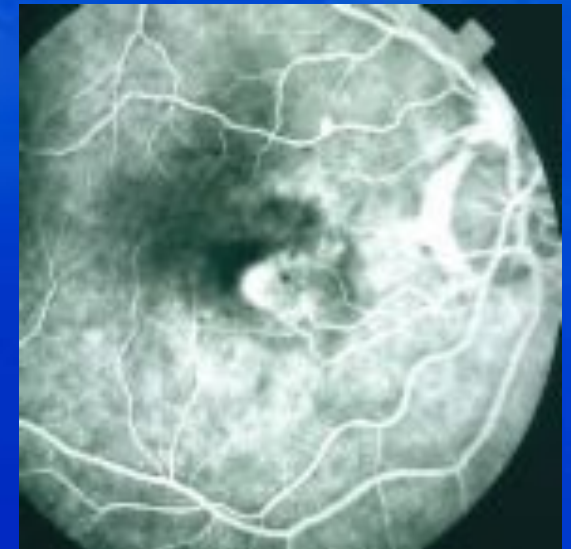
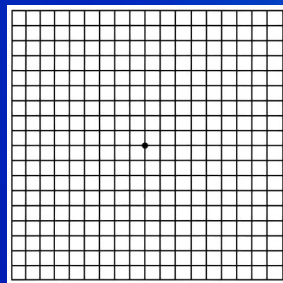
Visual acuity

Ophthalmoscopy

Amsler grid

OCT

Fluorescein angiography



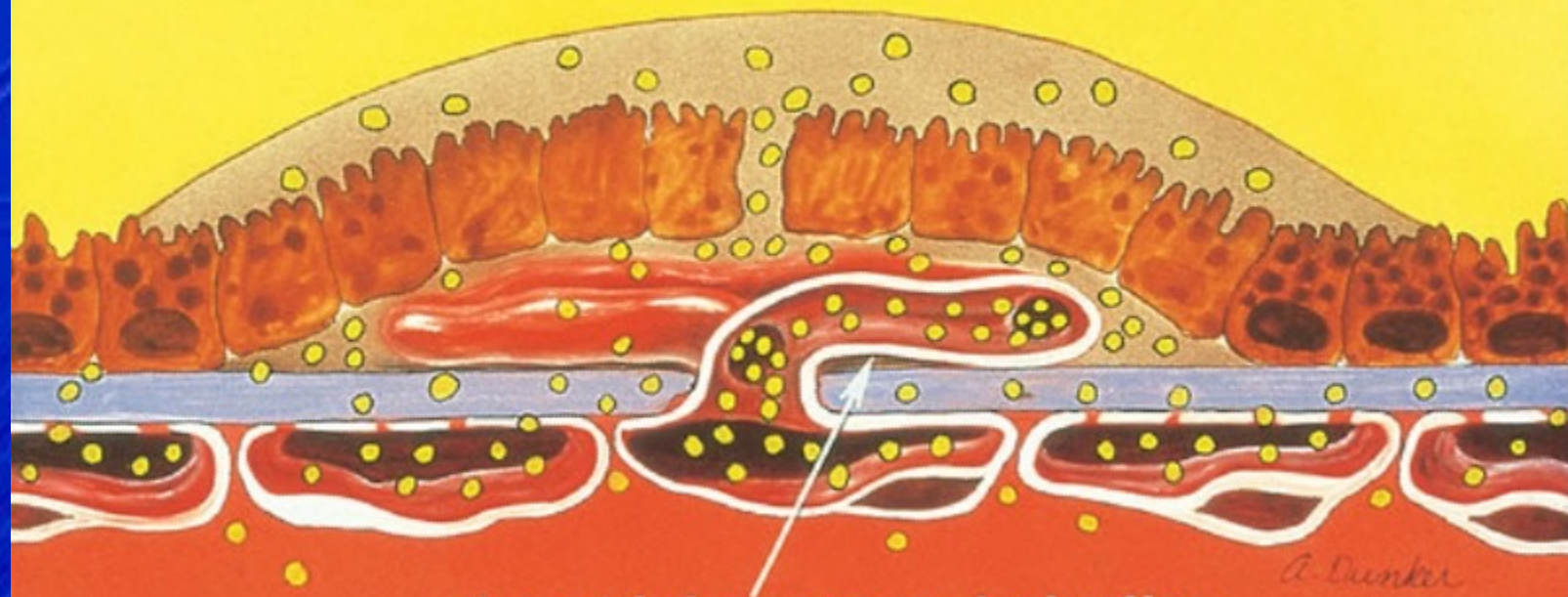


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sensory retina



**choroidal neovascularization**

*A. Dunker*

