



# Age-related macular degeneration

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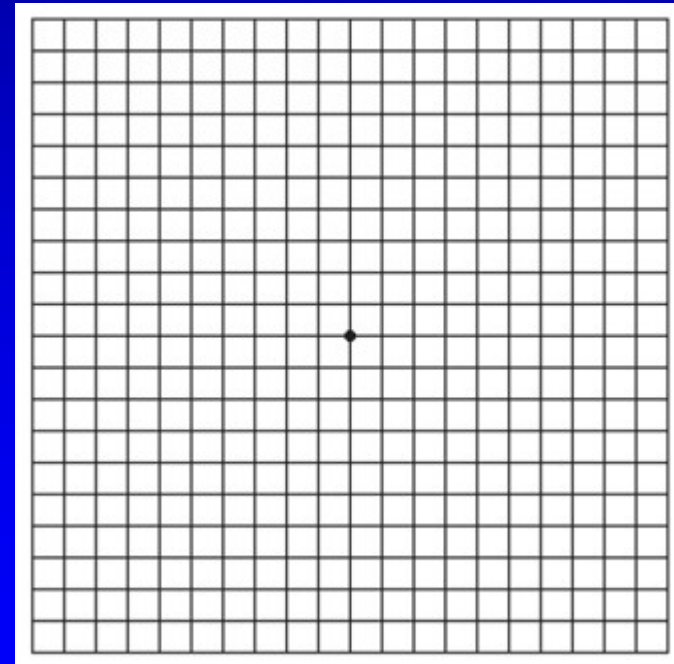
# Age-related macular degeneration (AMD)

- The most common cause of blindness in developed countries

# Age-related macular degeneration (AMD)

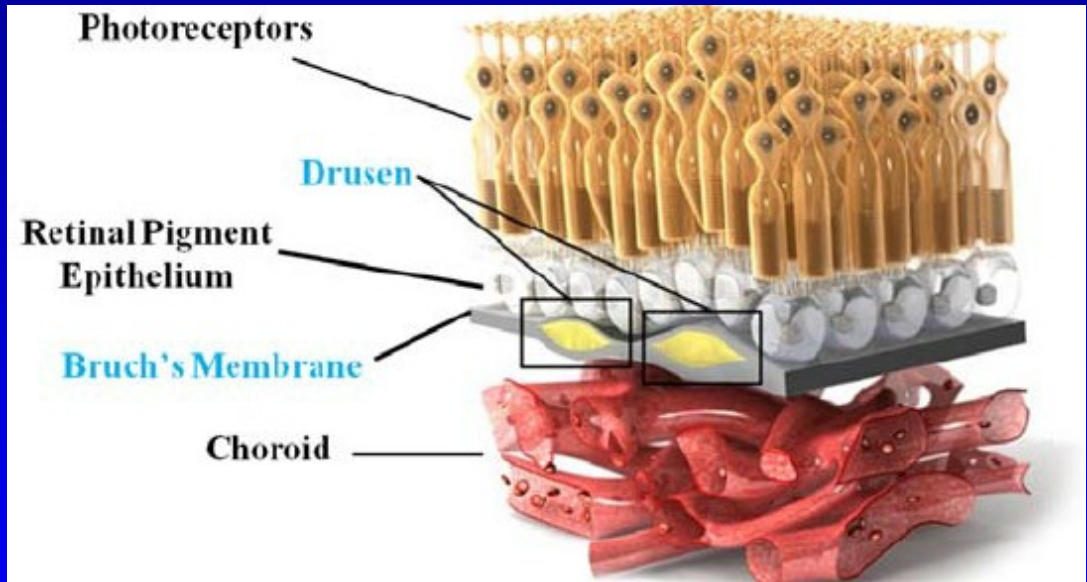
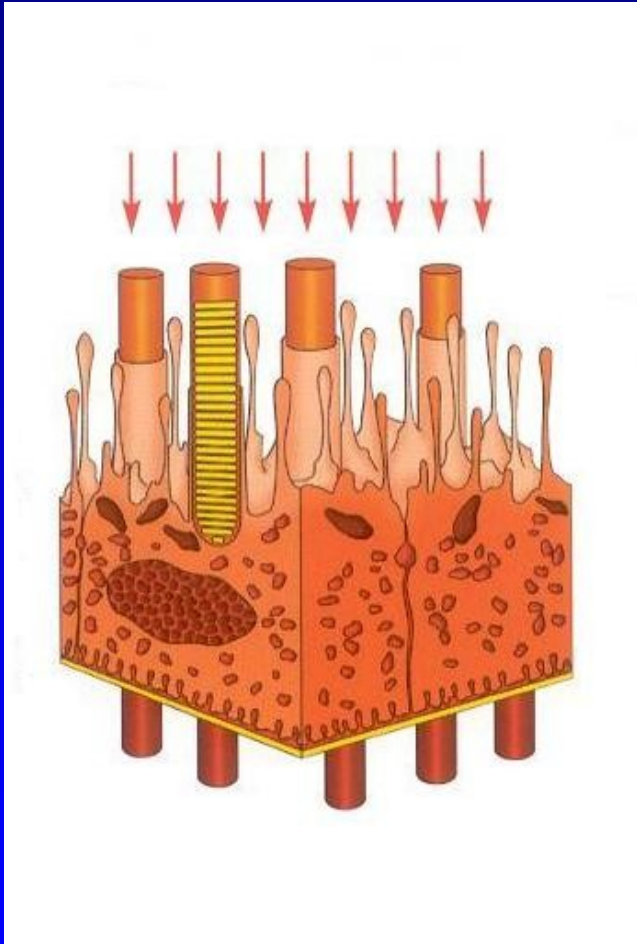
- AMD is multifactorial disease caused by combination of predisposing genes and influences of external environment

# Metamorphopsia



Amsler grid





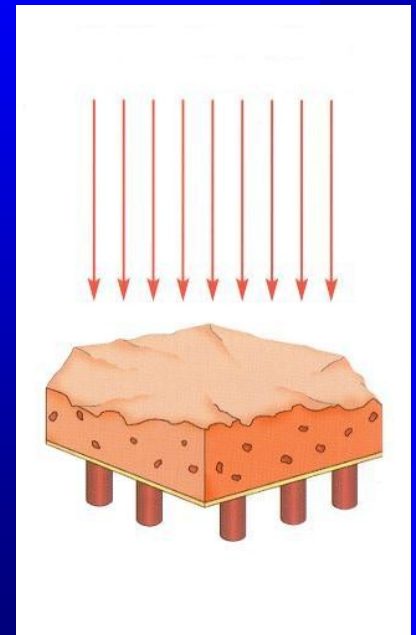
# Etiopathogenesis of AMD

↓ RPE cells with age (apoptosis, necrosis)

↓ melanosomes

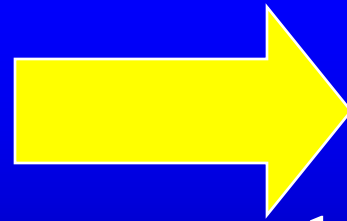
↑ lipofuscin accumulation

↓ apoptosis



# Classification of AMD

➤ Dry form of  
AMD

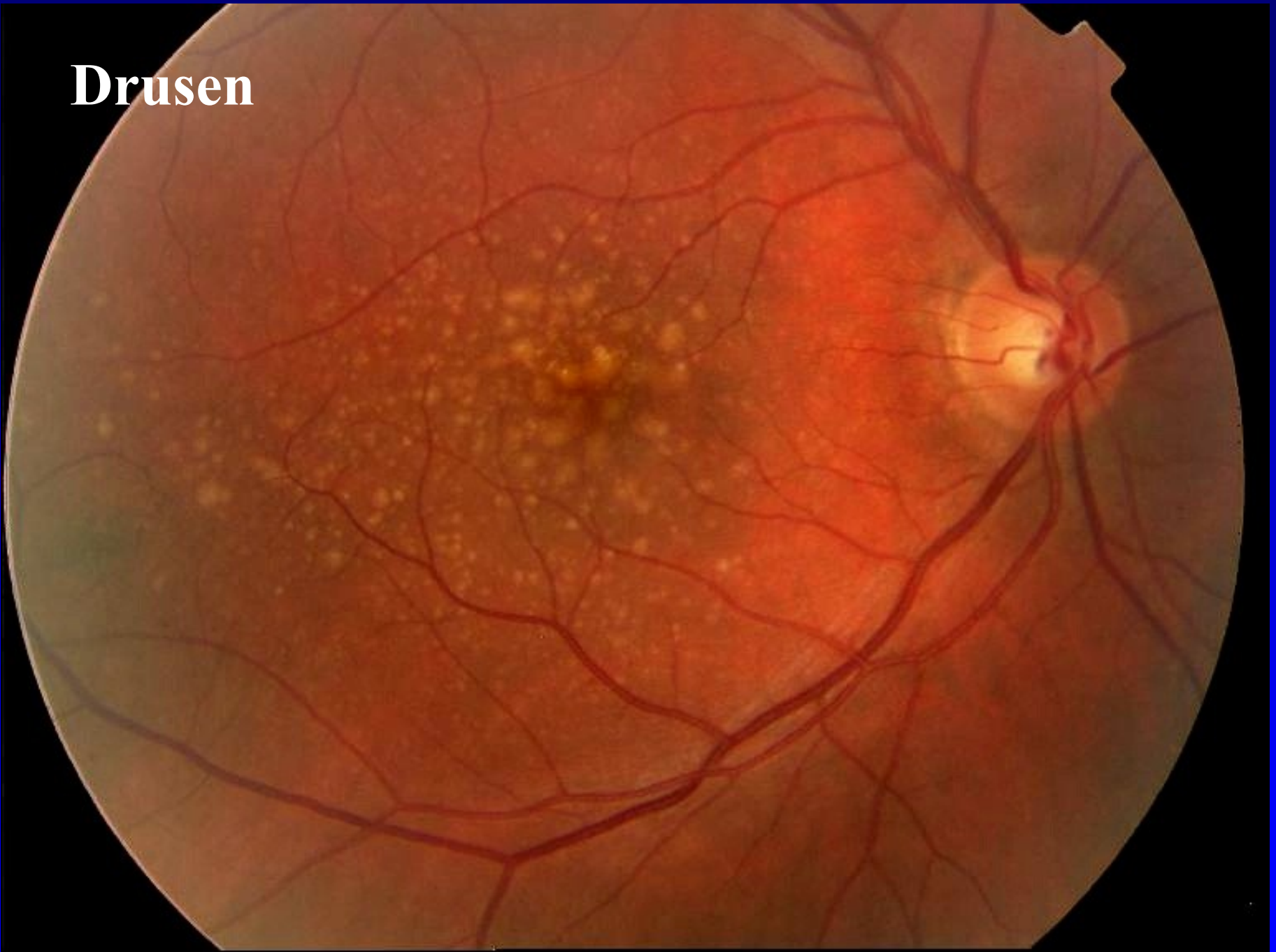


drusen, RPE  
changes,

geographic  
atrophy of RPE



**Drusen**



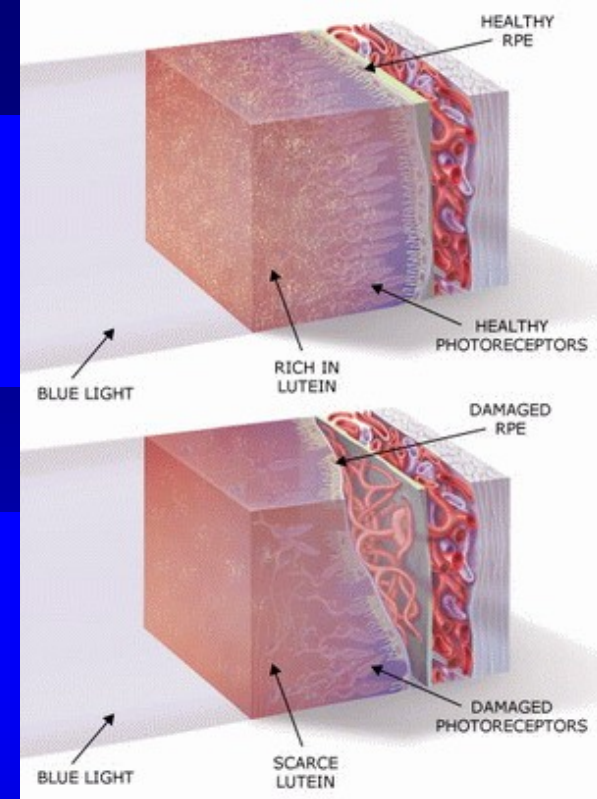
**RPE changes**



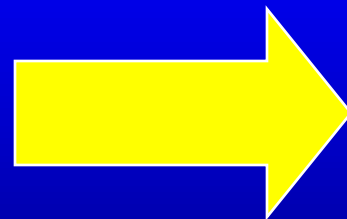
# Geographic atrophy of RPE cells



# Classification of AMD



Wet form of  
AMD



Choroidal  
neovascularisation

# Classification of AMD

➤ CNV



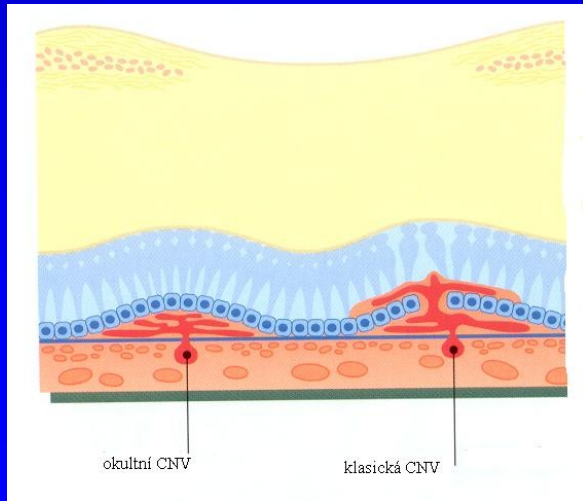
classical



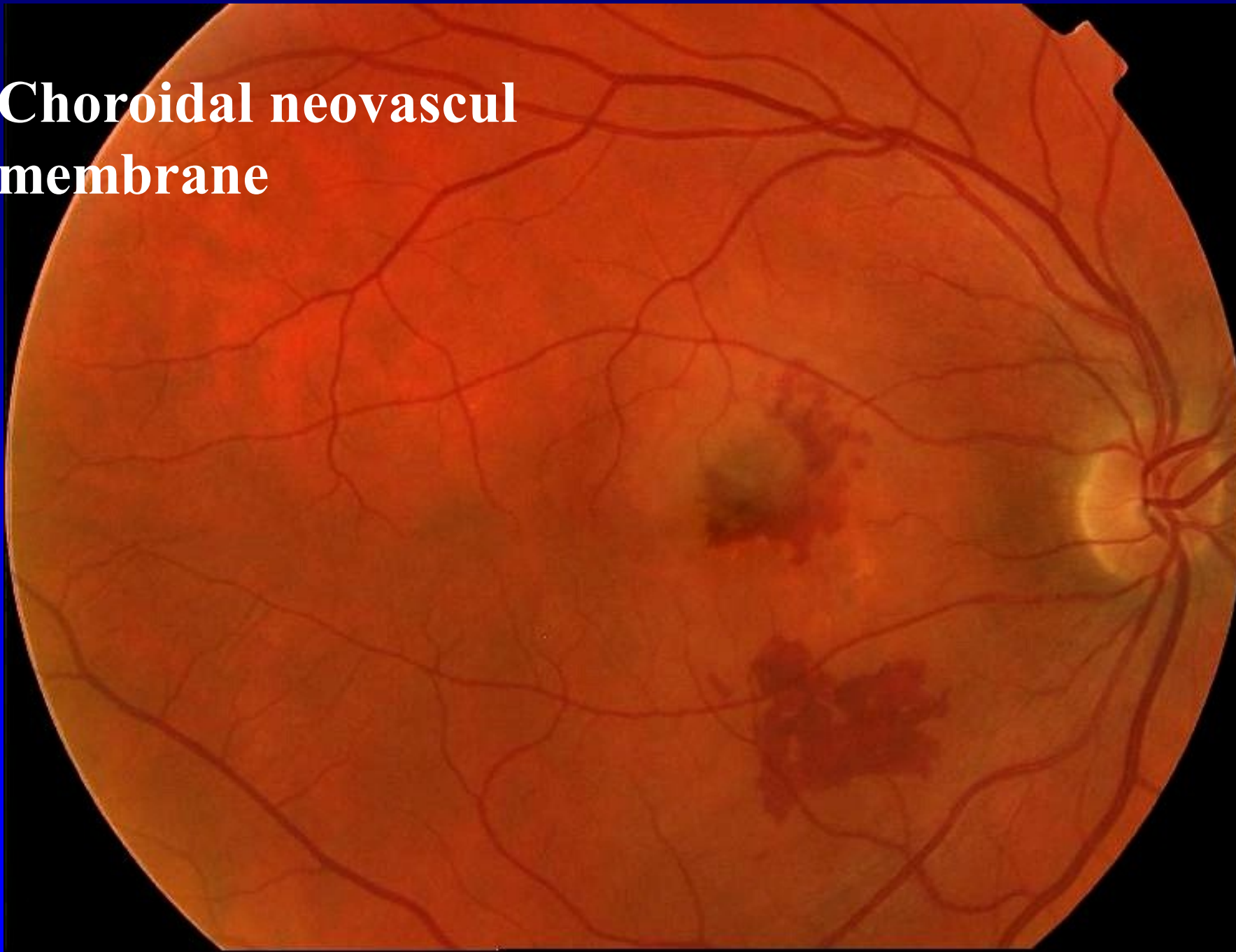
occult



minimally classic

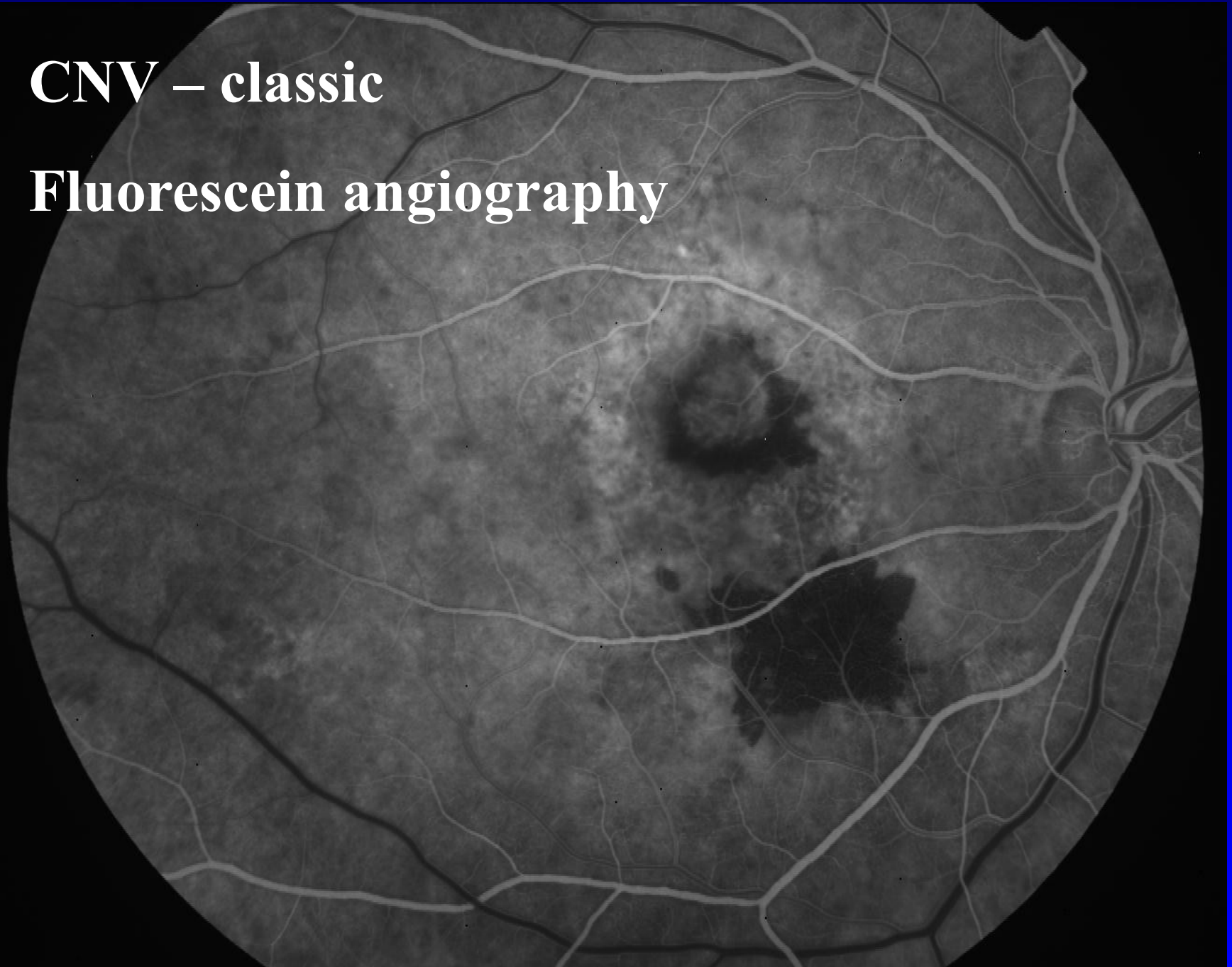


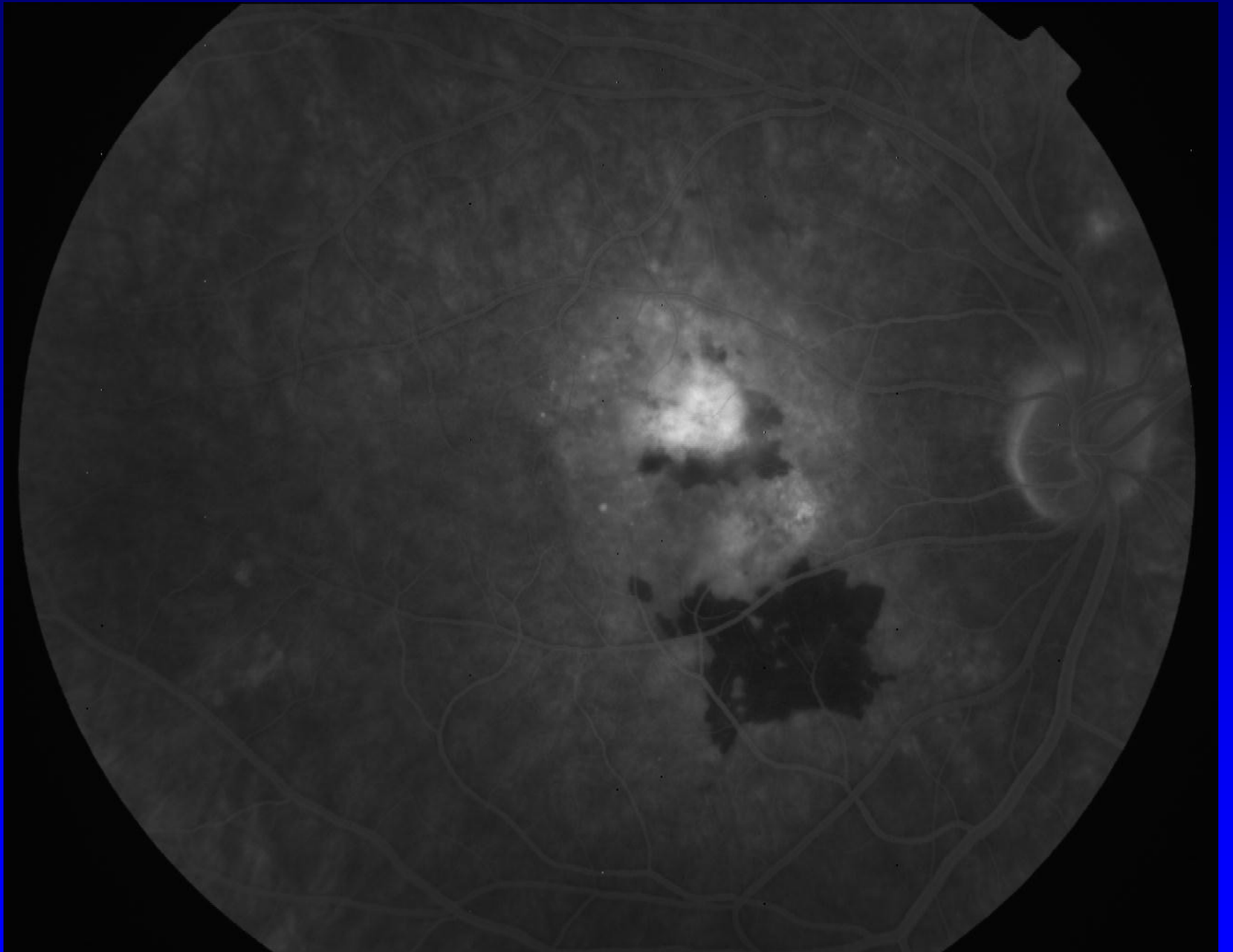
**Choroidal neovascular  
membrane**



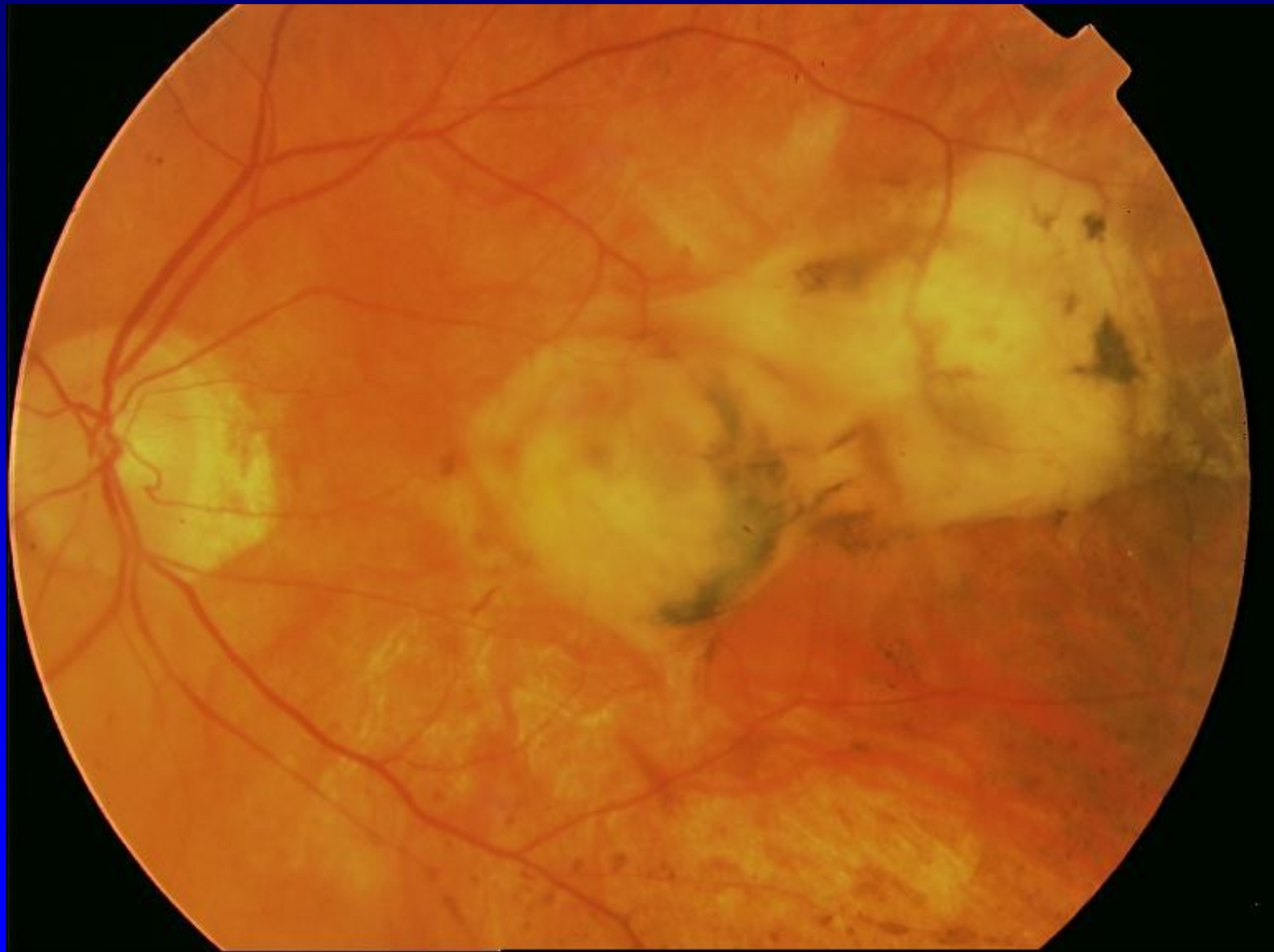
**CNV – classic**

**Fluorescein angiography**

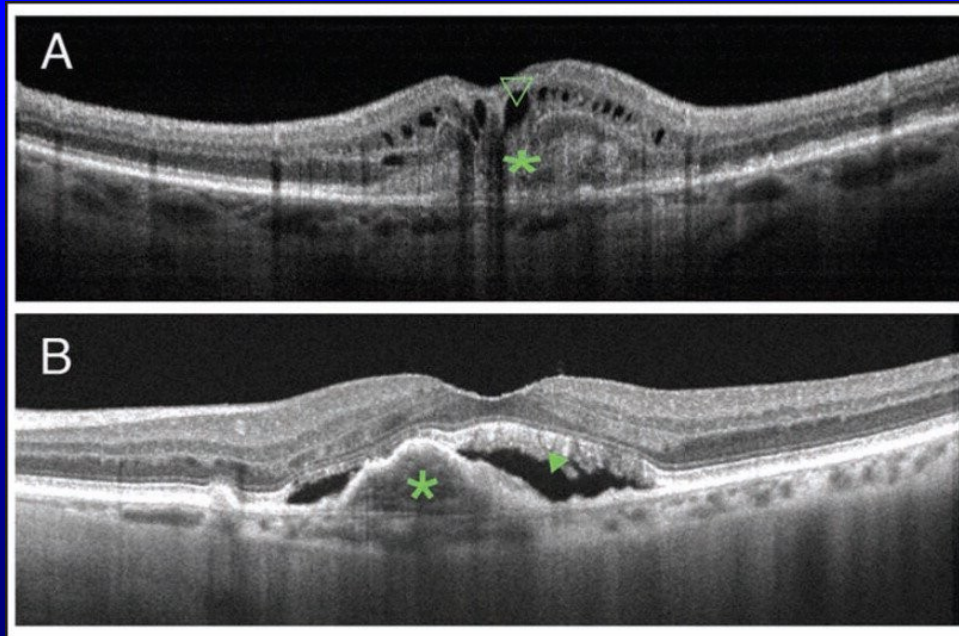








# Optical coherence tomography



# Risc factors of AMD

- Genetic factors
- Race influences
- Gender and hormonal influences

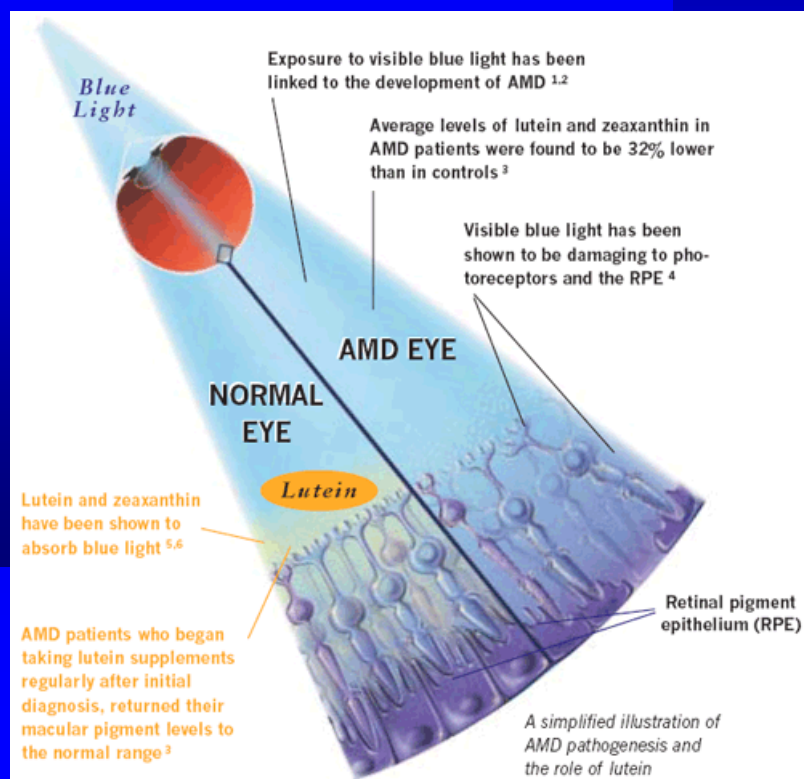
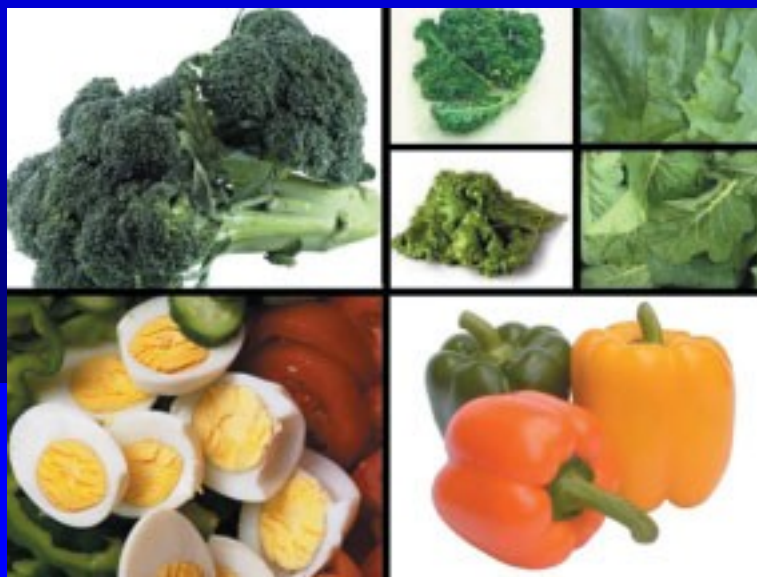
# Risc factors of AMD

- Vascular risc factors
- Environmental influences
- Antioxidants level



# Antioxidants

➤ **Lutein and zeaxanthin** (the most important retinal carotenoids)



# Therapy of AMD (summary)

- **Dry form - lutein, zeaxantin**
- **Wet form - Anti VEGF – intravitreal application**

