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Cross UHT London

# Compact Discs

A Short Guide to Getting on (with)  
Your Nerves

# The 2 Ps



Patterns

What can I see?

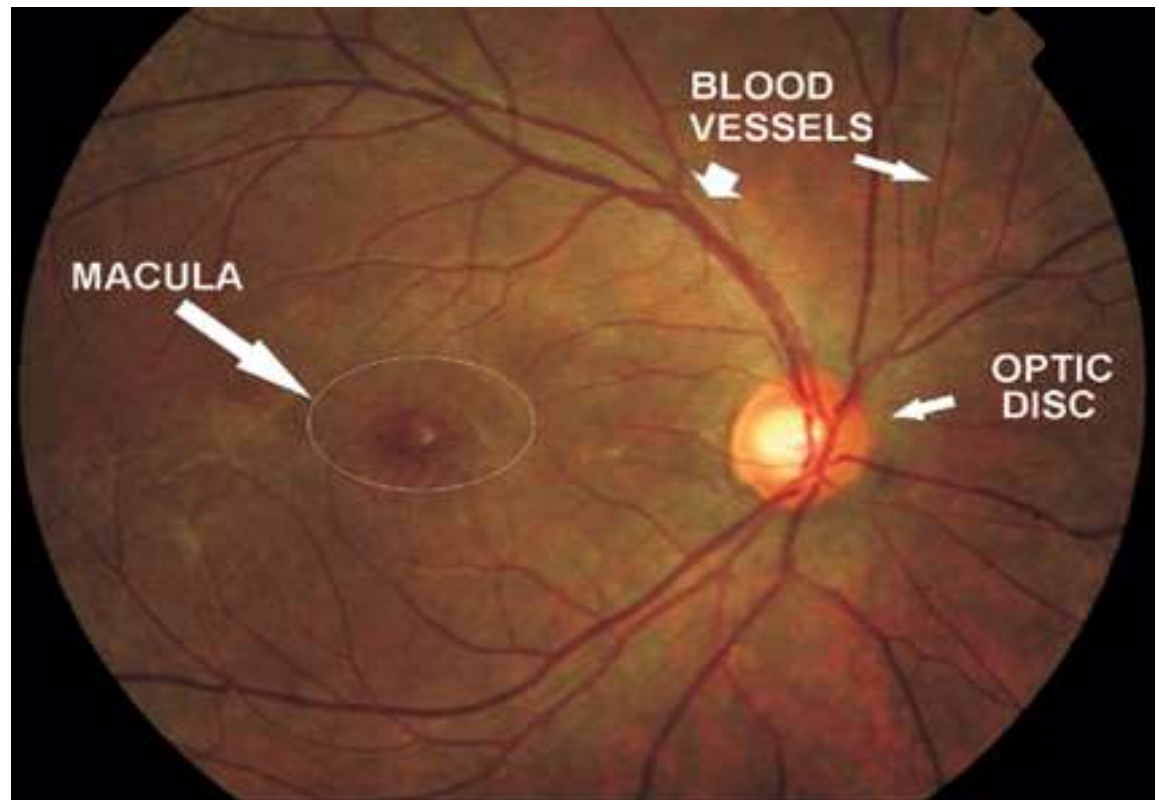


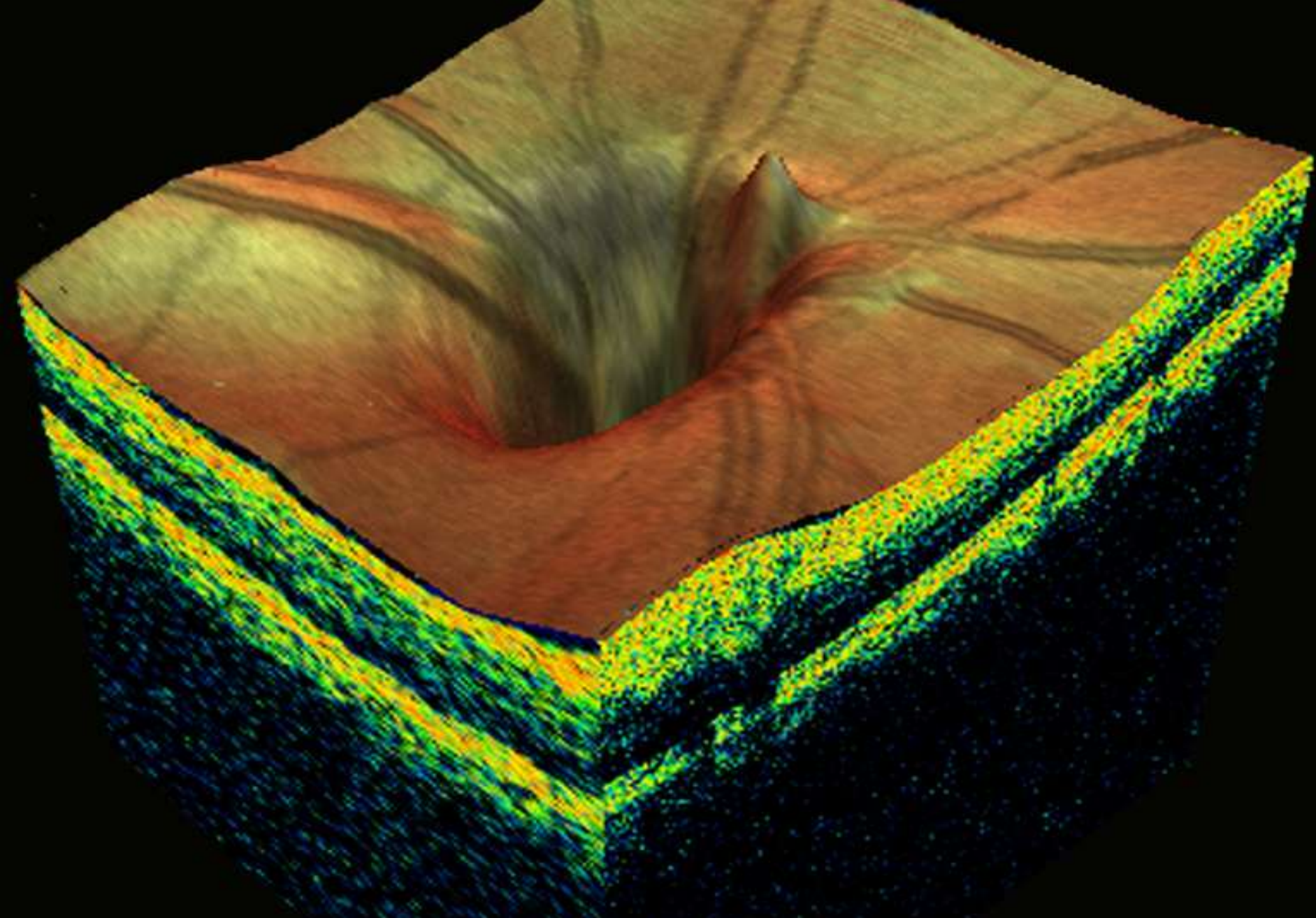
Phrases

What shall I call it?

# The Normal Disc

- Formed by 1.2 million ganglion cells from the retina
- 1.5 mm in diameter
- Pink or orange
- 0.3 mm cup





# Patterns

Cup

Edge

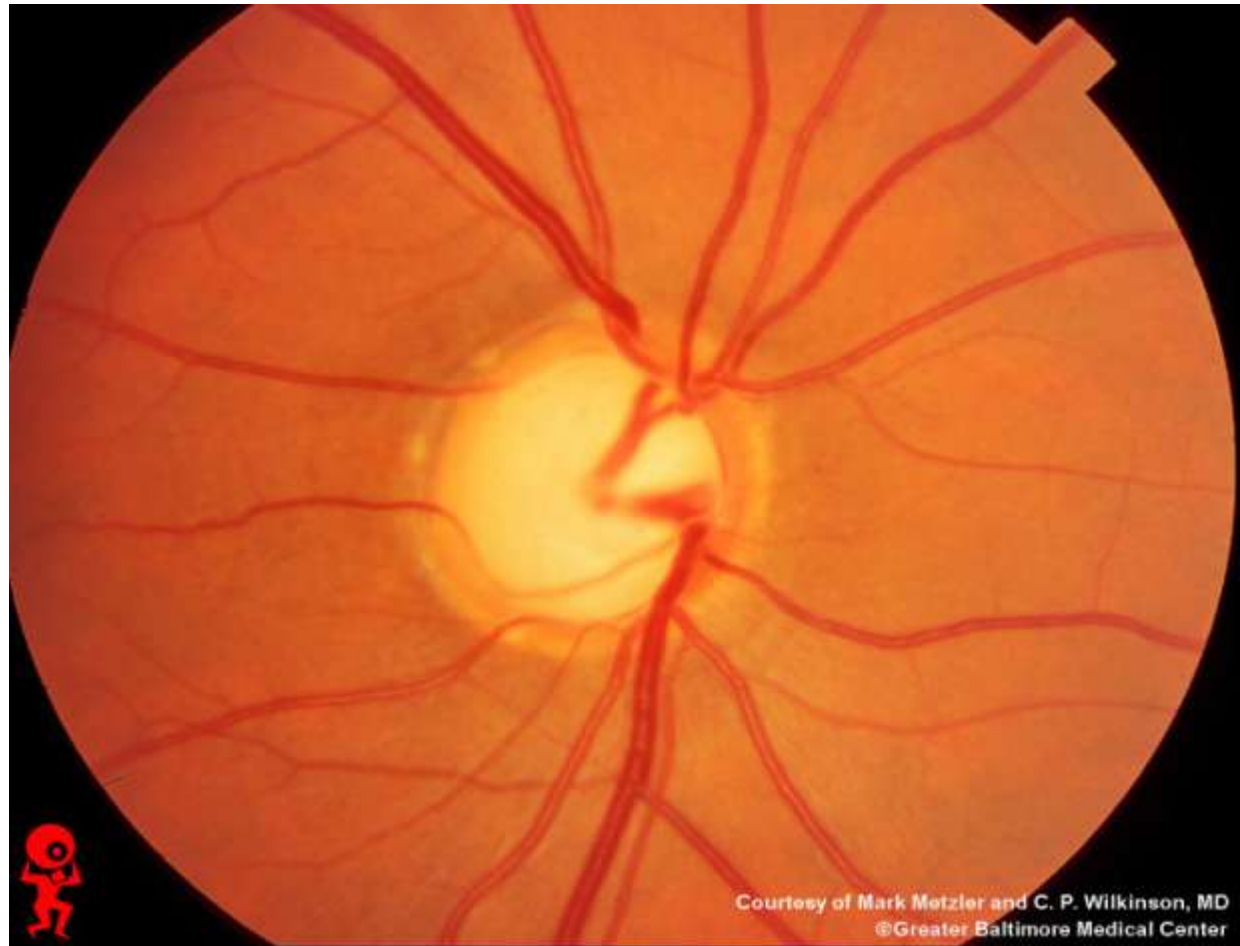
Colour

Blood vessels

Other abnormalities/congenital

# Cupping

- Characteristic of glaucoma
- Also optic nerve compression
- And optic nerve atrophy
- Physiological cups in large discs



Courtesy of Mark Metzler and C. P. Wilkinson, MD  
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# Glaucoma

A leading cause of blindness worldwide

It is a progressive optic neuropathy with characteristic optic disc and nerve fibre layer damage

# Risk Factors

Increased intraocular pressure

Old age

African descent

Family history

Possible Risk: Diabetes/Myopia/Hypertension



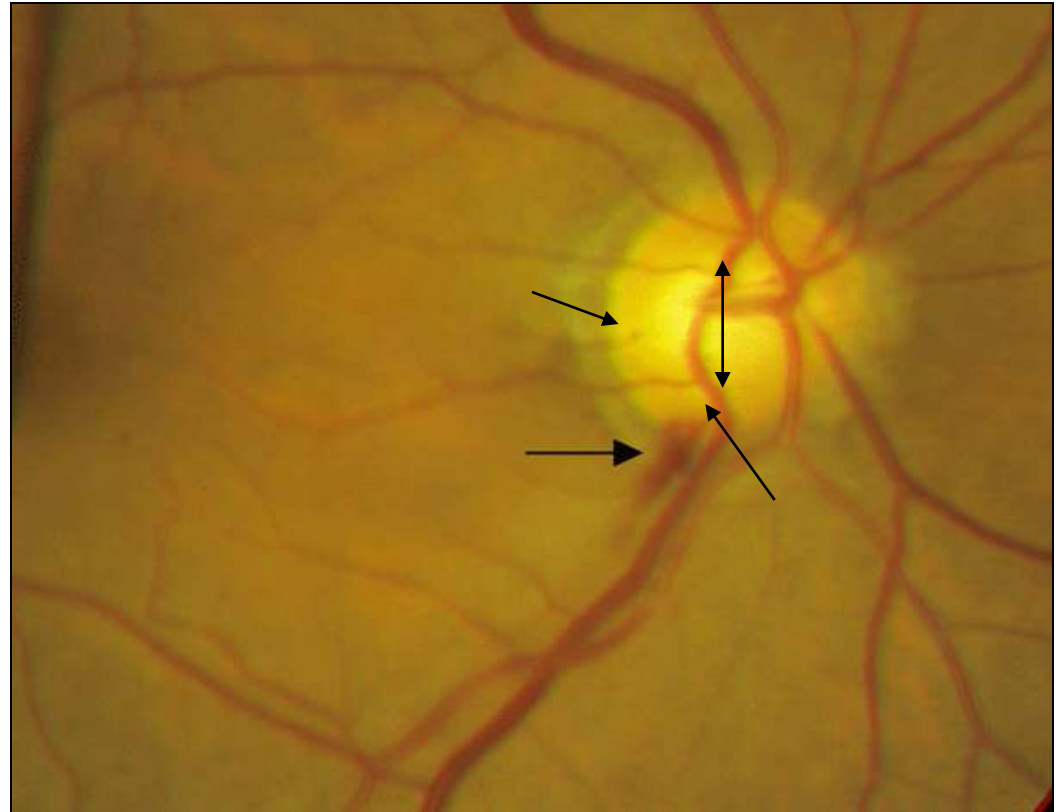
# Pattern

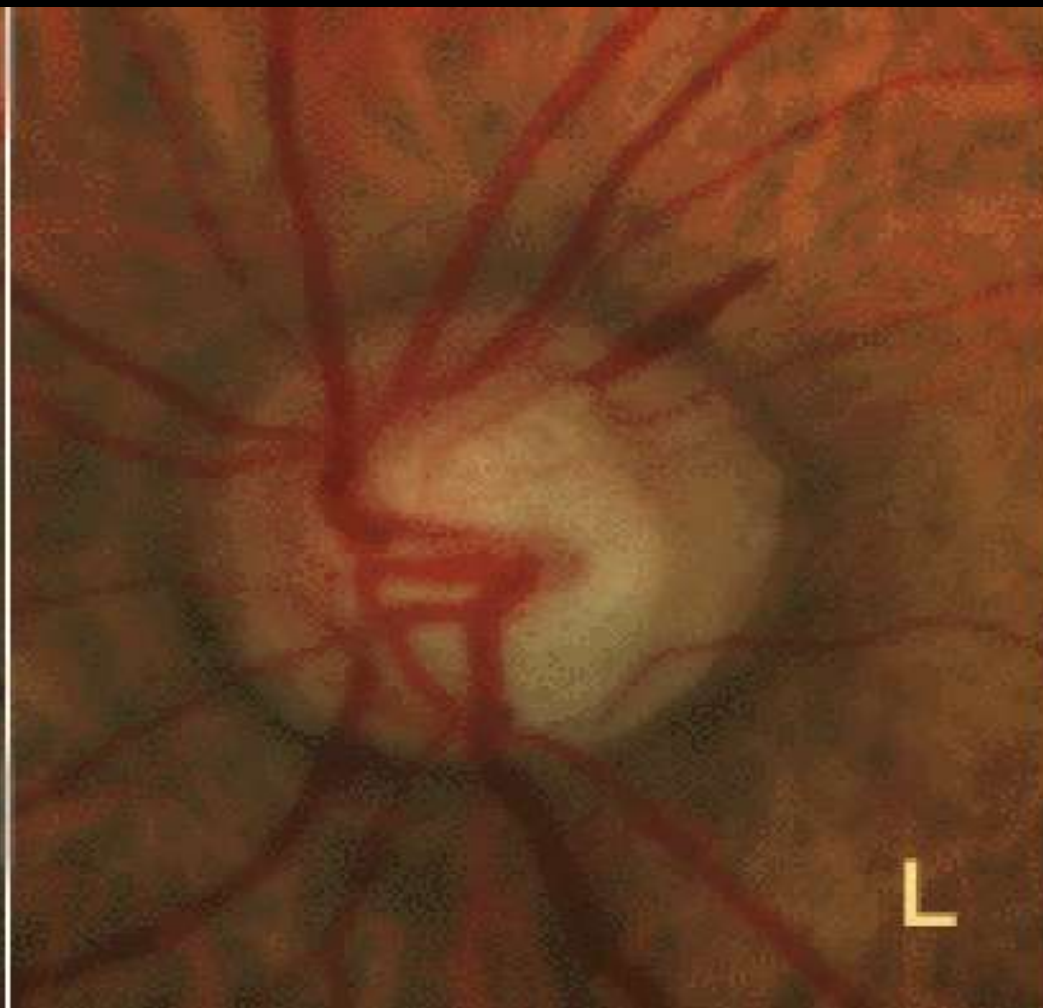
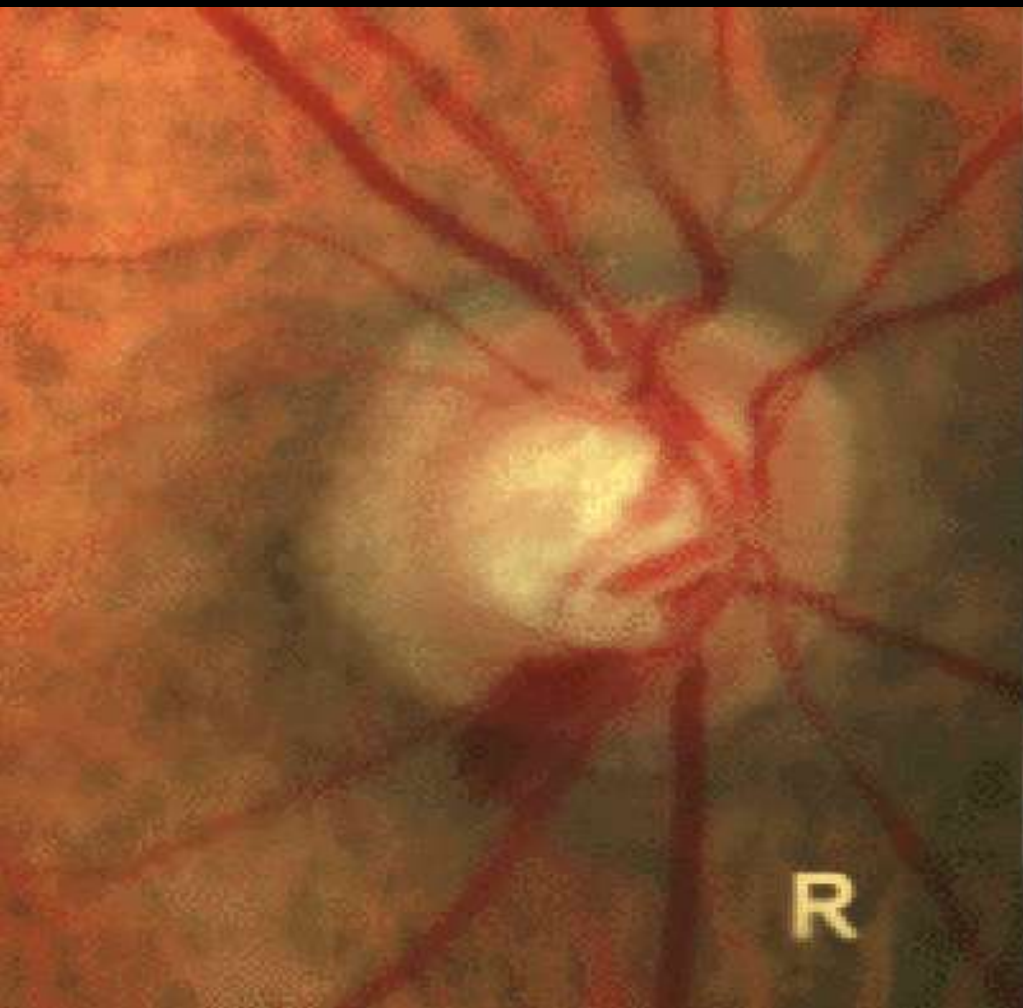
Increased cup size

Thin neuroretinal rim

Notching of rim

Splinter haemorrhage at margin

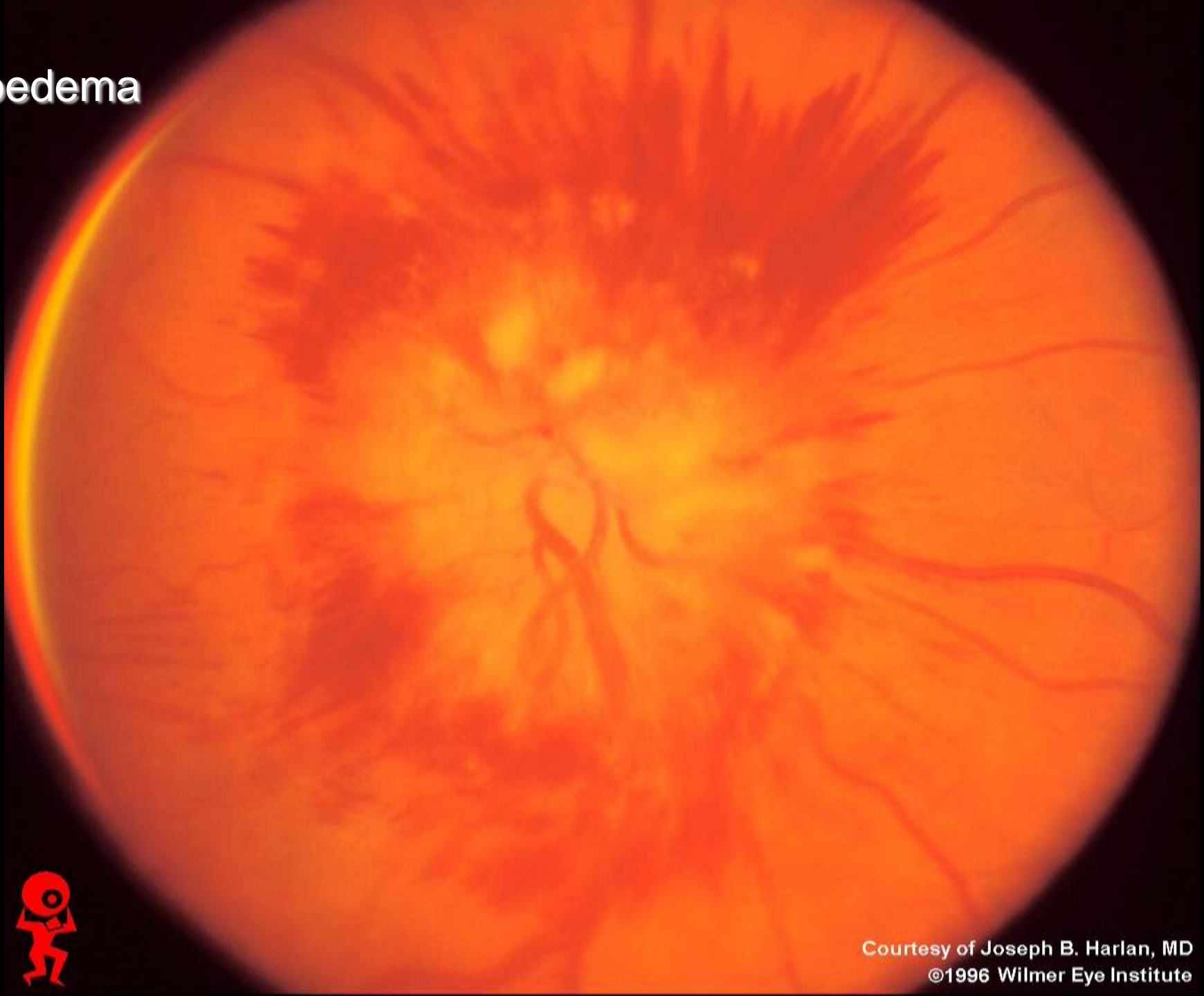




# Swollen/Blurred Edges

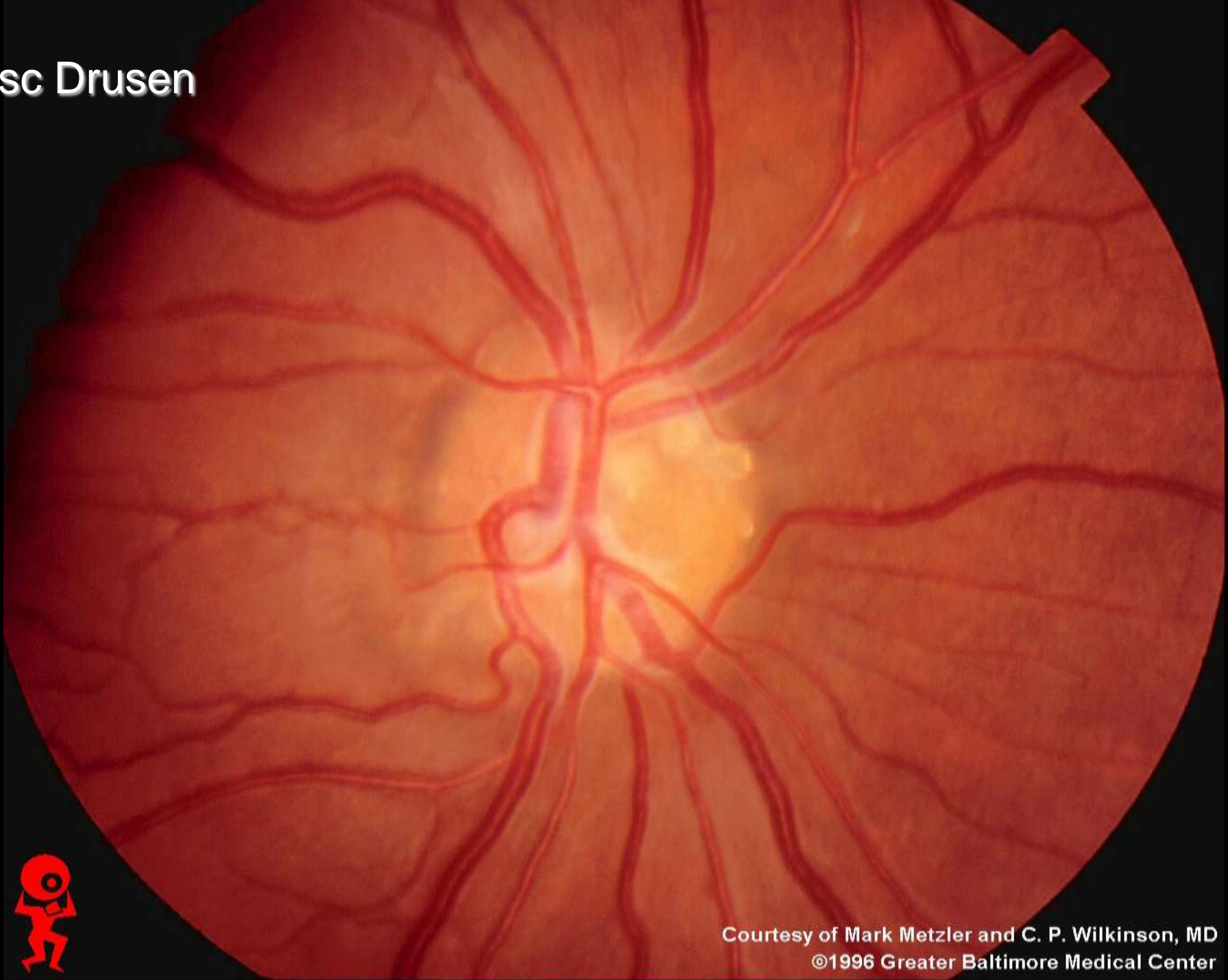
- Anterior Optic Neuropathy (ischaemic, inflammatory, infiltrate, compressive)
- Pseudopapilloedema (optic nerve head drusen, small optic disc, tilted, myelinated nerve fibres)
- Papilloedema
- Pseudoedema (Leber's, methanol poisoning)
- Intraocular Disease (CRVO, posterior uveitis, posterior scleritis, hypotony)
- Accelerated Systemic Hypertension

# Papilloedema





# Optic Disc Drusen



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Myelinated nerve fibres



Courtesy of Mark Metzler and C. P. Wilkinson, MD  
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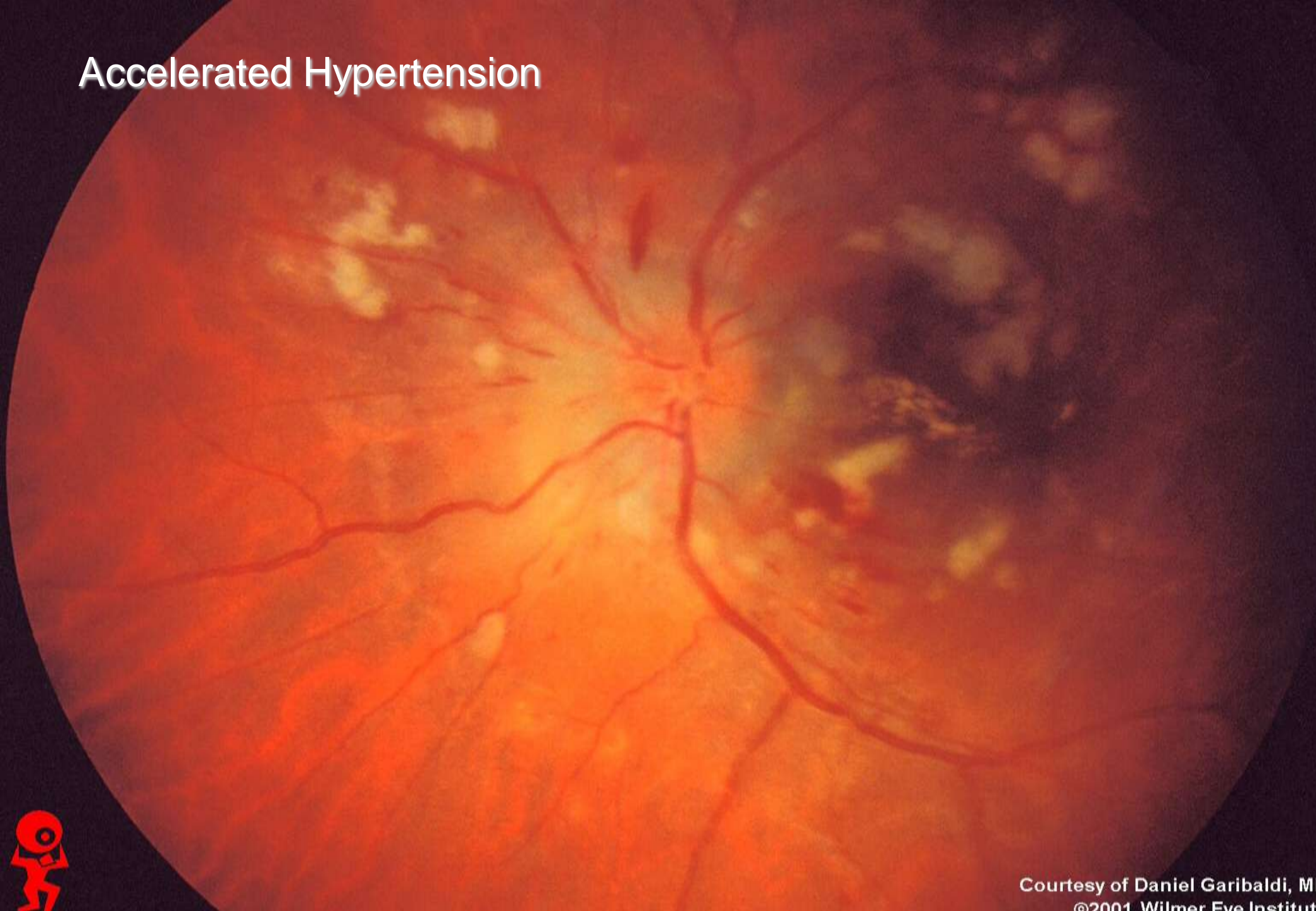
CRVO



Courtesy of Joseph B. Harlan, MD  
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# Accelerated Hypertension



Courtesy of Daniel Garibaldi, M.D.  
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# Pale/Disc Pallor

Late response to

Optic nerve disease

Retinal disease

# Leber's Optic Neuropathy



Courtesy of Min Kim, MD  
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# Blood vessels

- Neovascular
- Anomalous
- Occluded - CRVO, CRAO

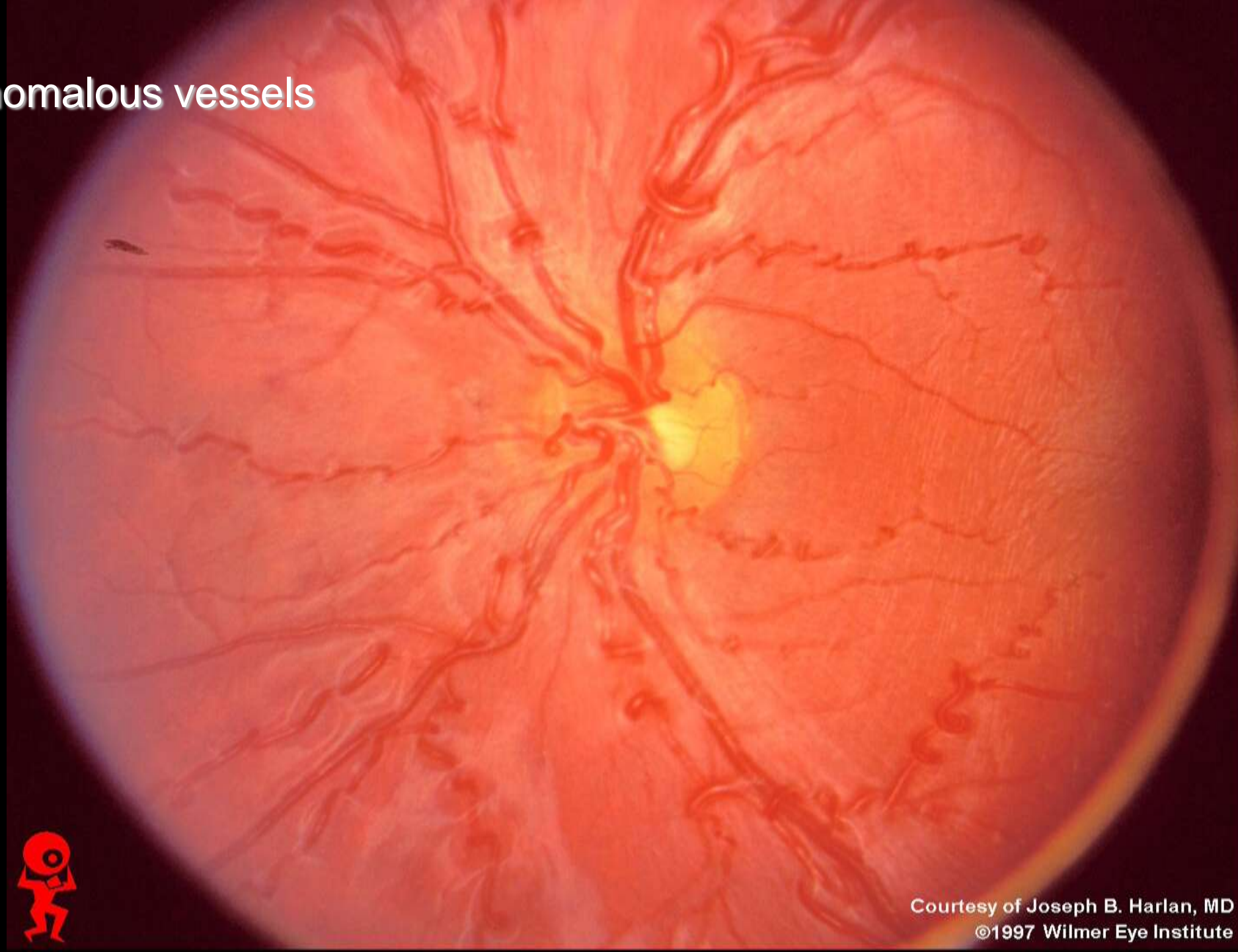


Disc new vessels



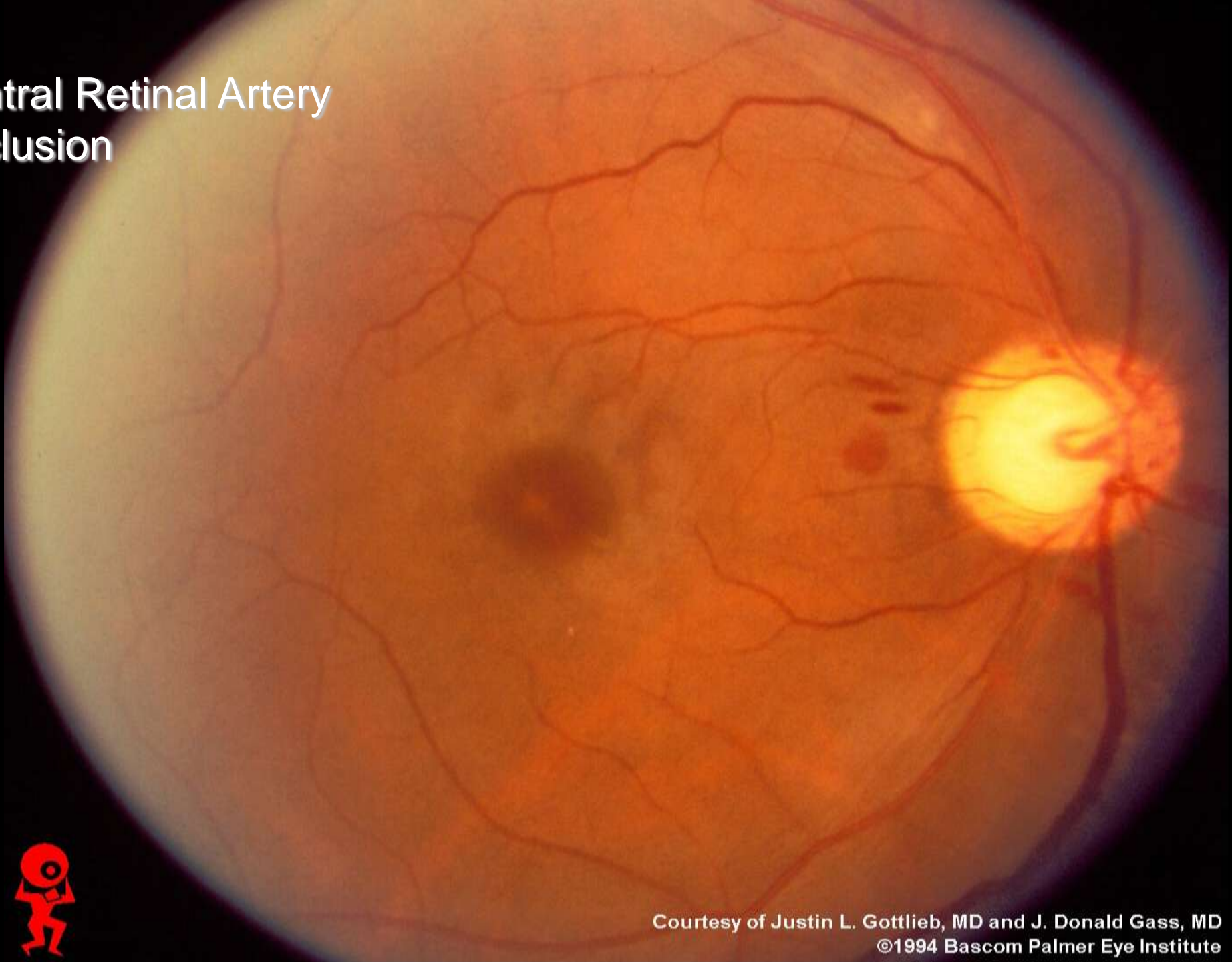
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# Anomalous vessels



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# Central Retinal Artery Occlusion



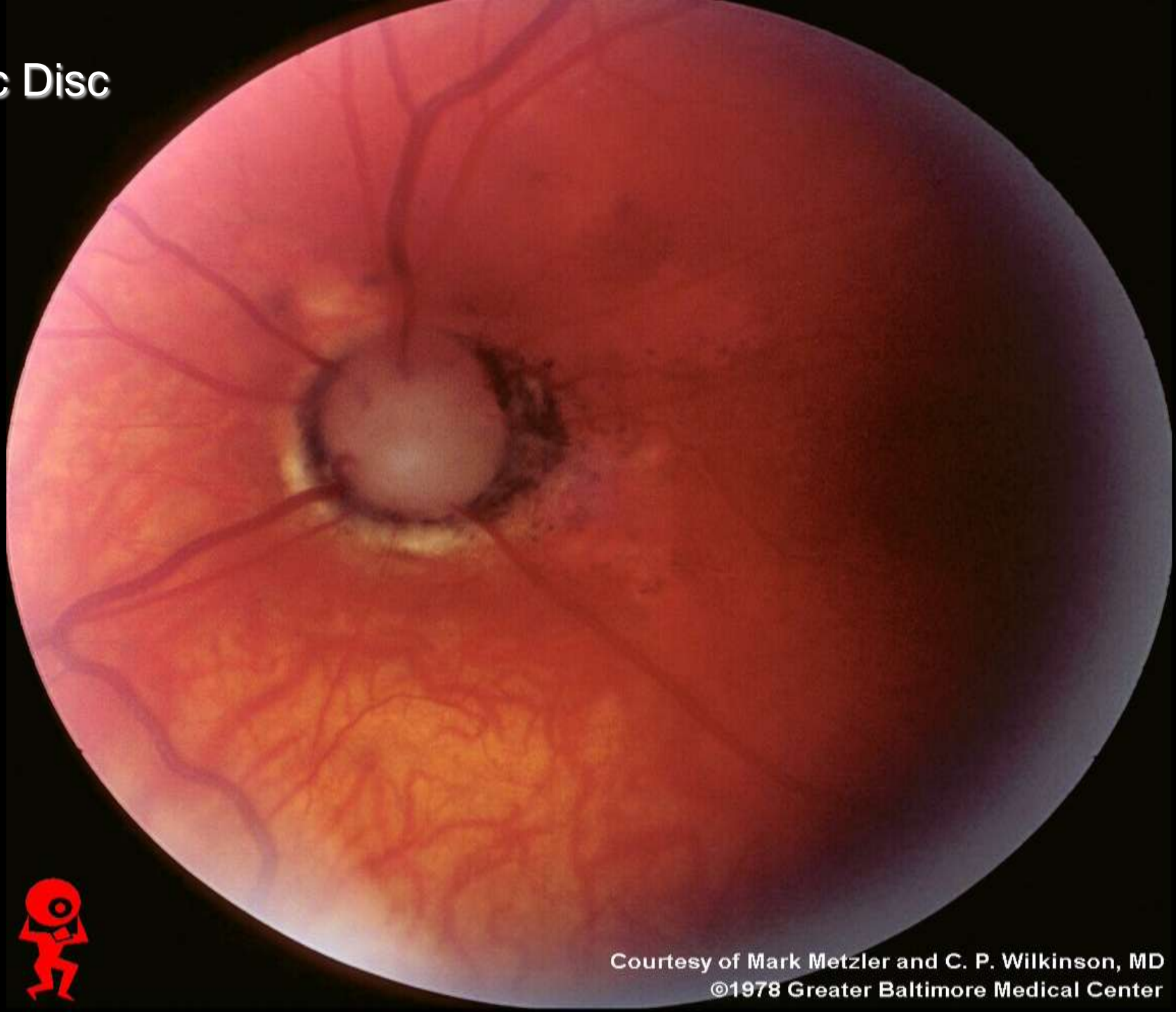
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# Congenital/Other

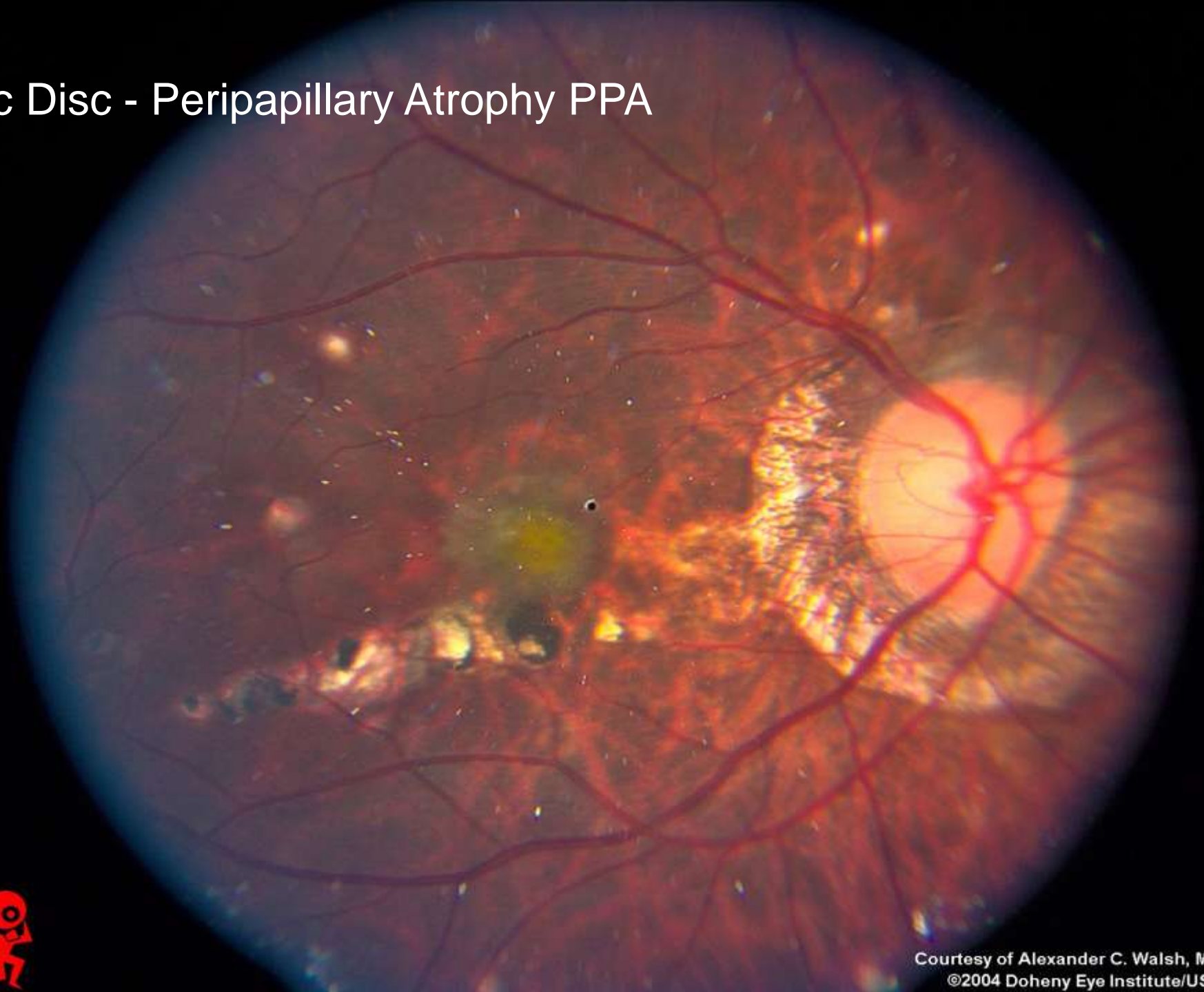
- Hypoplastic
- Myopic - Peripapillary Atrophy
- Glial Veil
- Optic Pit
- Coloboma

# Hypoplastic Disc



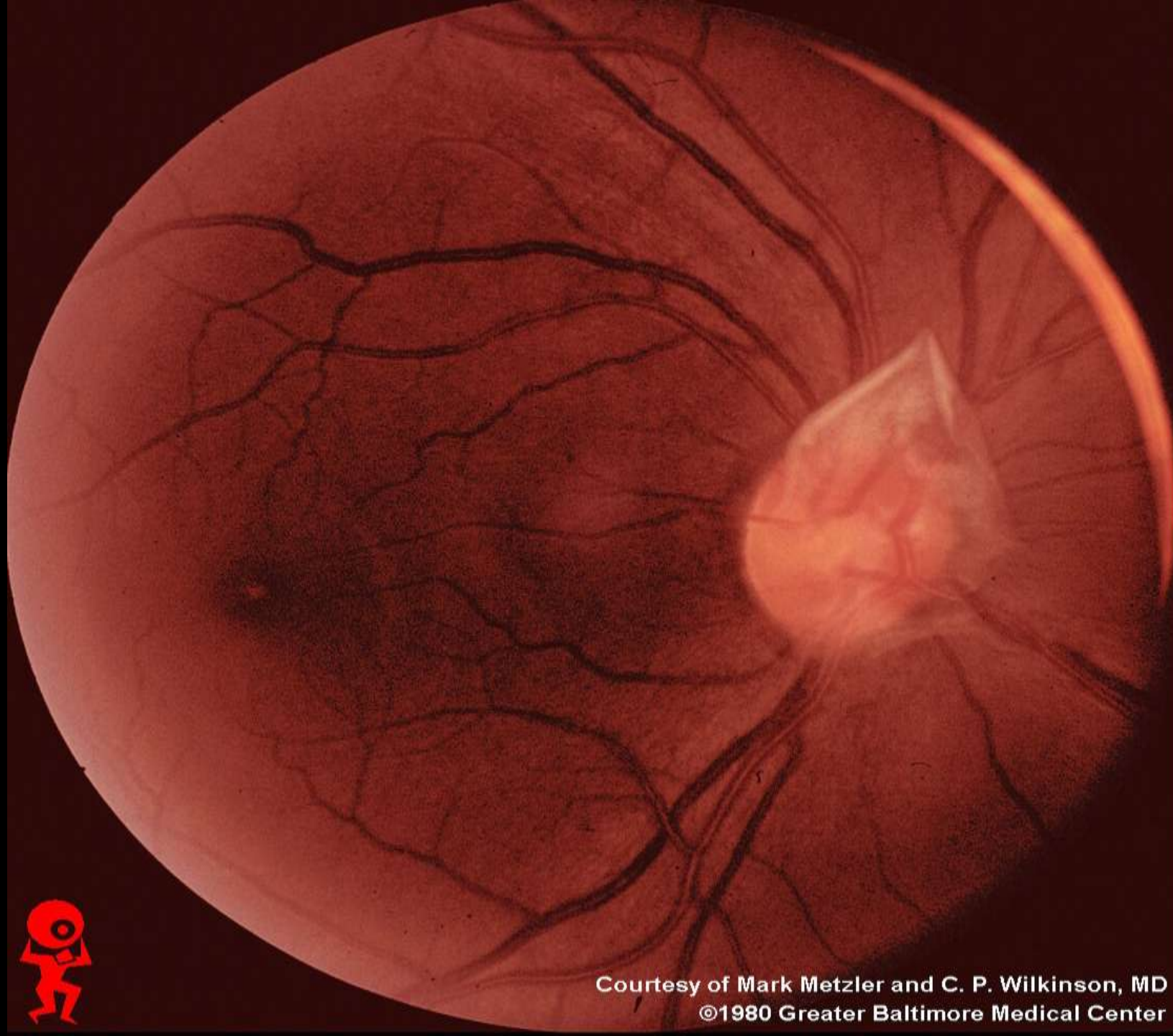
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# Myopic Disc - Peripapillary Atrophy PPA



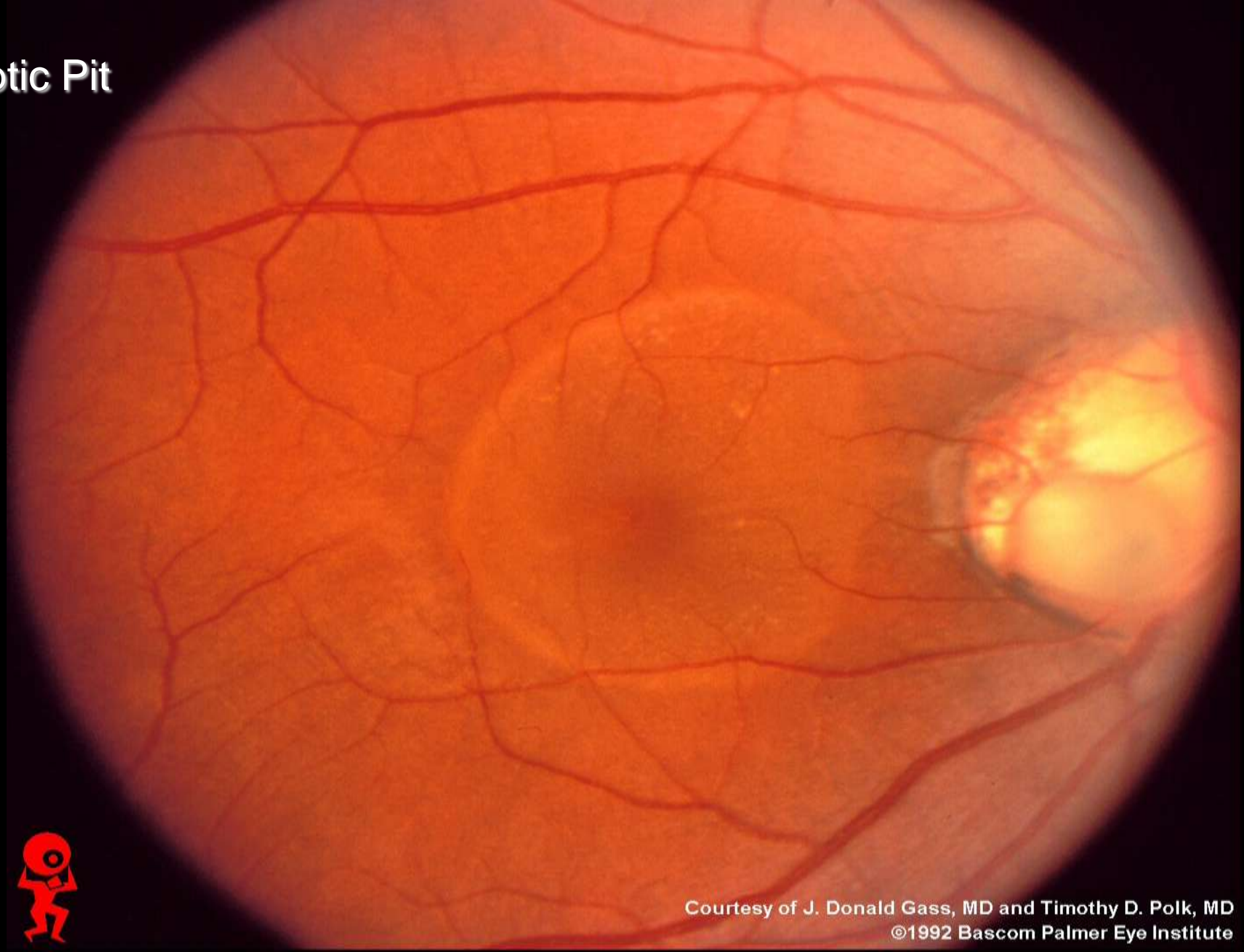


# Glial Veil



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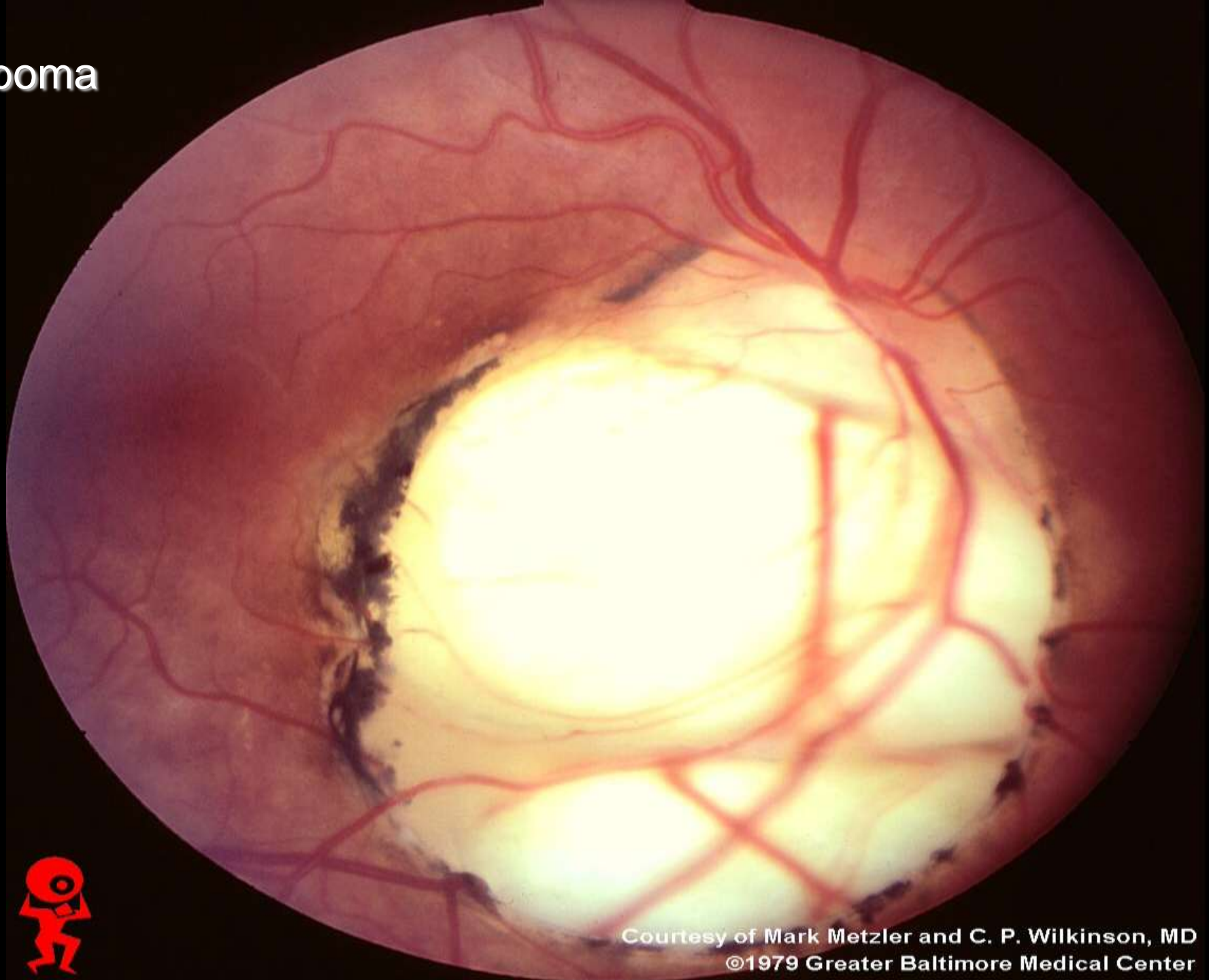
# Optic Pit



Courtesy of J. Donald Gass, MD and Timothy D. Polk, MD  
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# Coloboma



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# 10th March 2011

I am organising a National Retinal Screening Meeting for everybody involved in  
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