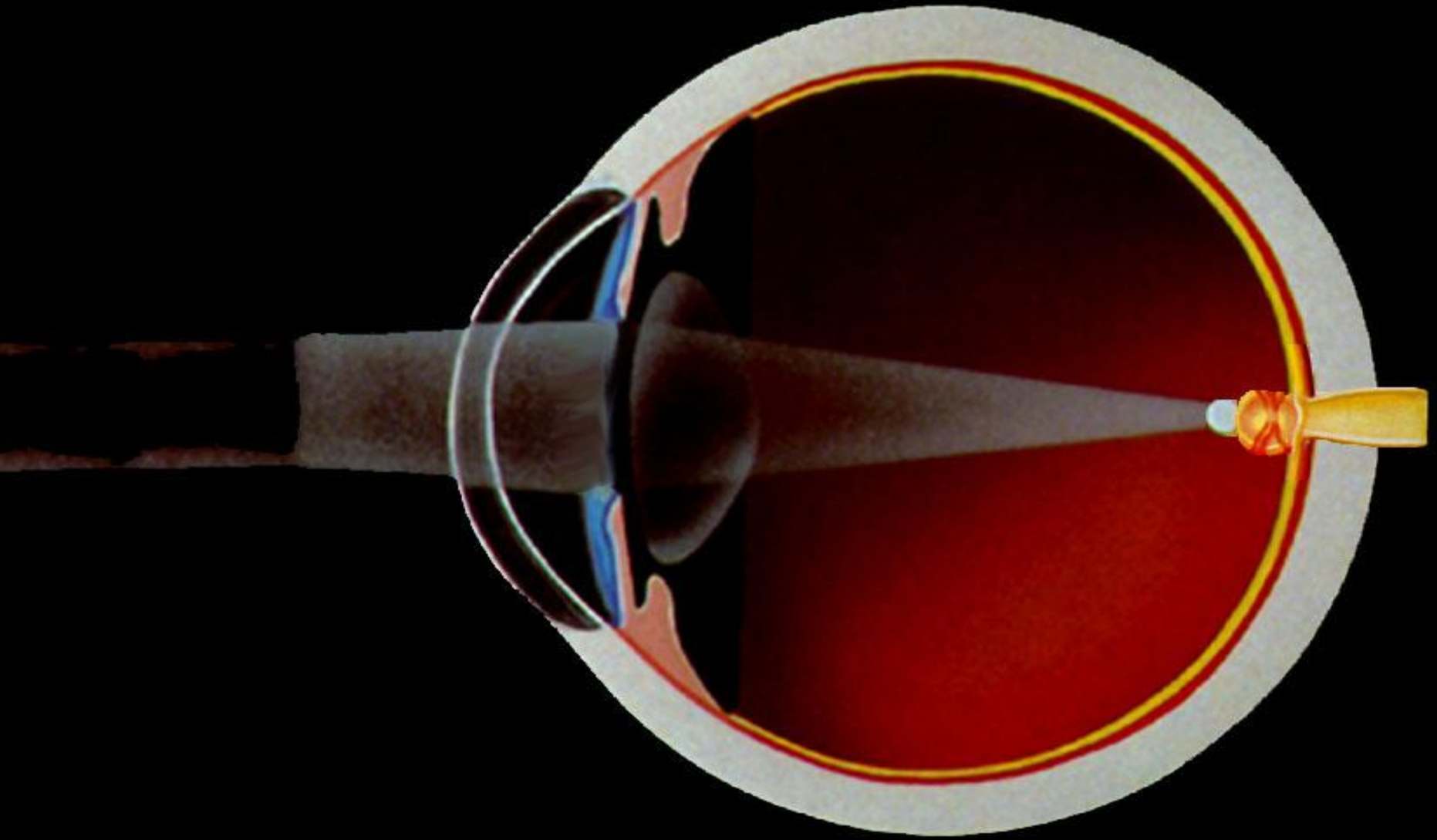
ACUTE VISUAL LOSS

Dr:ADNAN AL MARZOUKI

ACUTE VISUAL LOSS

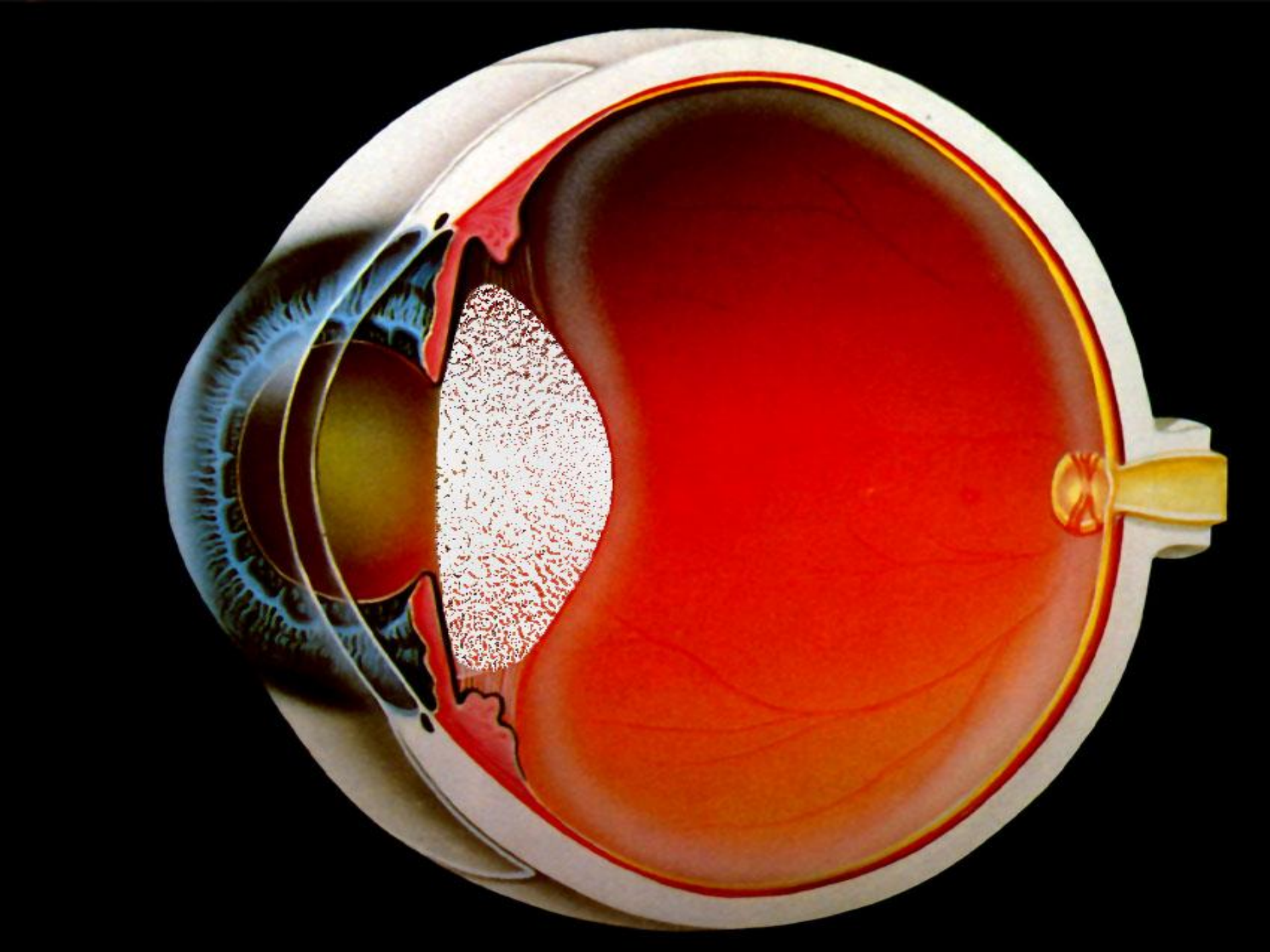
- ***Anatomical Classification***
  - *Media Problems*
  - *Visual Pathway Problems*

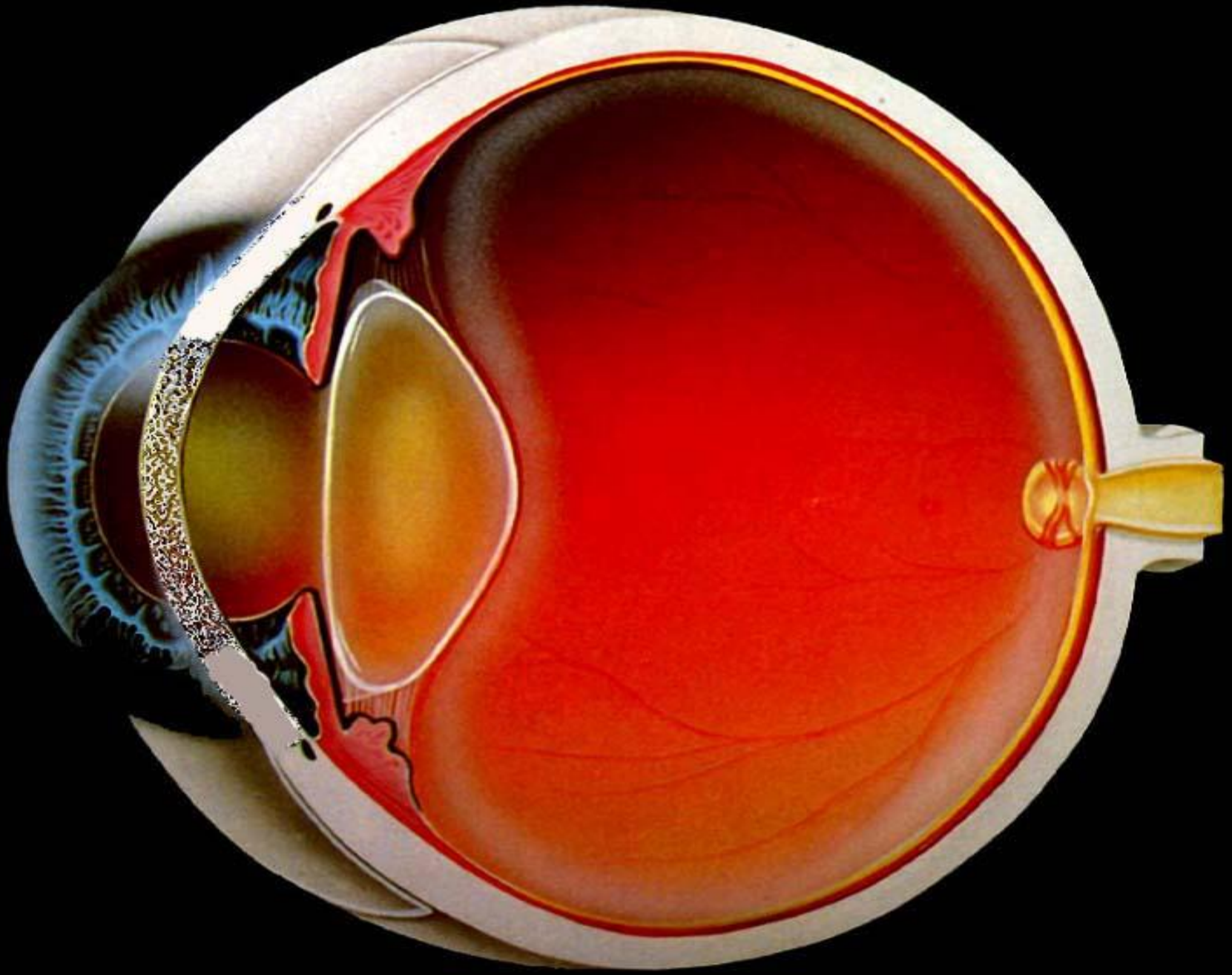
- ***Symptomatic Classification***
  - *Transient*
  - *Permanent*
  - *Painful*
  - *Painless*

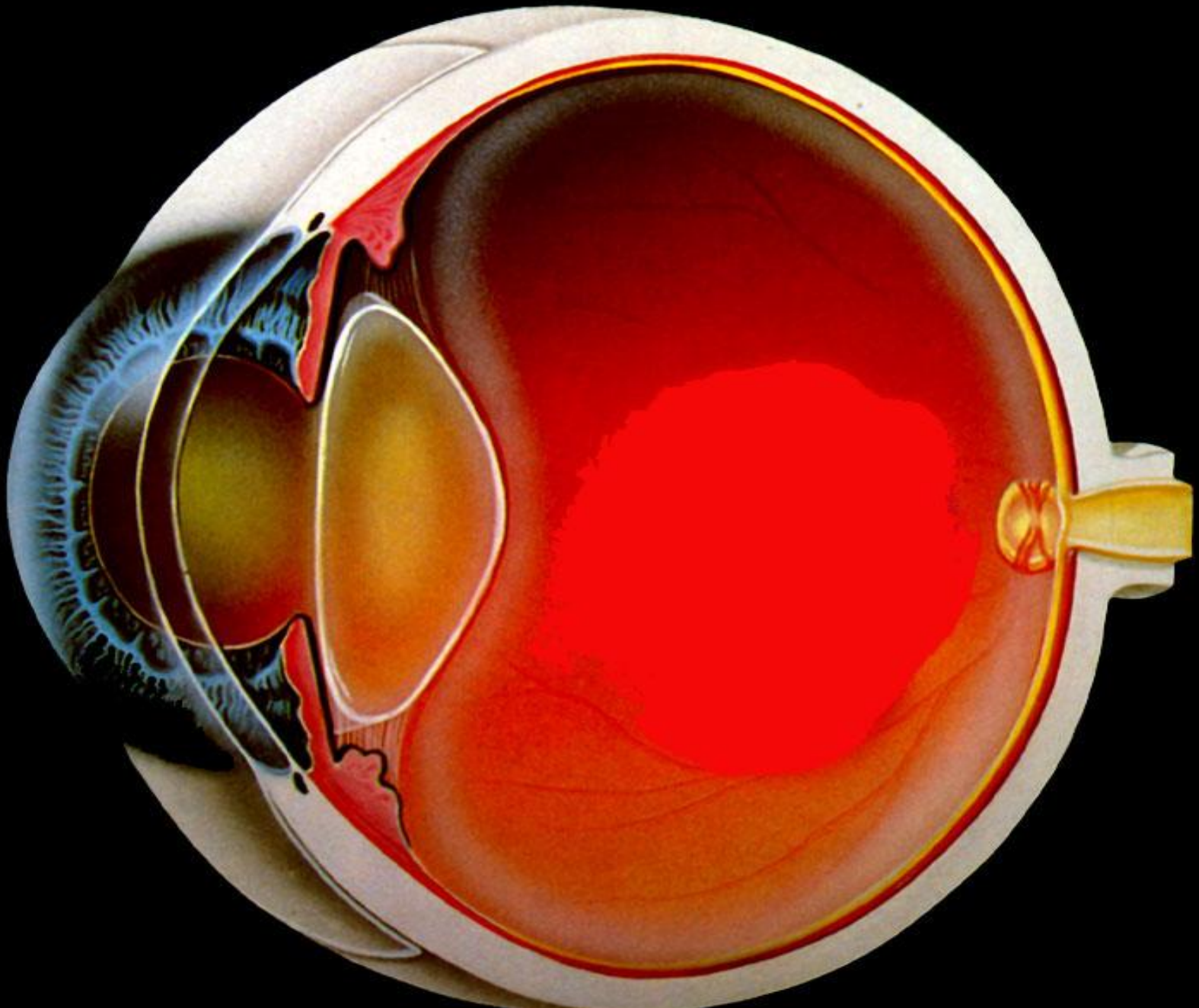


1) Anatomical Classification

- A. ***Media Problems***
  1. **Corneal problems**
  2. **Ant . Chamber problems**
  3. **Lens problems**
  4. **Vitreous problems**
- ***B. Visual Pathway Problems***
  1. **Retinal problems**
  2. **Optic nerve problems**
  3. **CNS.problems**







1) Anatomical Classification

A. Media Problems

1. Corneal Causes

i. *Infection (ulcer – Bacteria – Viral)*

ii. *Edema – A.C.G. - Hydrops*

1) Anatomical Classification

A. Media Problems

2. Anterior Chamber Causes

i. ***Hyphema -Traumatic***

- Spontaneous

ii. ***Hypopion - Severe inflammation***

Anatomical Classification

- ***A. Media Problems***
  3. Lens Causes

     i. Traumatic - Dislocation
        - Sublaxation

     ii. Diabetic - Sudden fluctuation in B.S.

1) Anatomical Classification

- ***A. Media Problems***

4. Vitreous Causes

Vitreous Haemorrhages

‘‘Diabetic V.H.’’

1) Anatomical Classification

- **B. Visual Pathway Problems**
  1. **Retinal Causes**
     - i. Retinal Detachment
     - ii. Retinal Artery Occlusion
       - _ Central
       - _ Brach
     - iii. Retinal Vein Occlusion
       - _ Central
       - _ Brach

1) Anatomical Classification

- ***B. Visual Pathway Problems***
  1. Retinal Causes
     - iv. Retinitis , Chorio retintis, chorioditis
     - v. Macular Disease
       - _ Acute A.R.M.D.

1) Anatomical Classification

- ***B. Visual Pathway Problems***

2. Optic Nerve Causes
   i. Optic Neuritis & Retrobulbar Neuritis
   ii. Papillitis (M.S.)
   iii. Papilledema
   iv. Ischemic Optic Neuropathy
   v. Traumatic (Retrobulbar Injection)
   vi. Compressive (Thyroid orbitopathy)

1) Anatomical Classification

- ***B. Visual Pathway Problems***

3. C.N.S Cases

i. Optic Chiasm (Bitemp.Hemianopsia)
Pituitary Apoplexy

ii. Optic tract , Radiation (Hemonemous Hemianosia)
Inforrection or He Tumor.

iii. Cortical Blindness

iv. Functional

SYMPTOMATIC CASSIFICATION

- **B. Visual loss lasting longer than 24hrs**
  - i. **Sudden Painless Loss**

    - Retinal artery or Vein occlusion

    - Ischemic Optic Neuropathy

    - Vitreous Haemorrhage

    - Retinal Detachment

SYMPTOMATIC CASSIFICATION

- ***B. Visual loss lasting longer than 24hrs***

  ii. ***Gradual Painless Loss***

  - Cataract
  - Refractive Errors
  - Open Angle Glaucoma
  - Diabetic Retinopathy
  - A.R.M.D.

SYMPTOMATIC CASSIFICATION

- B. Visual loss lasting longer than 24hrs

iii. Painful Loss

-Acute Angle Closure Glaucoma

- Optic Neuritis

-Uveitis

- Corneal Hydrops

CENTRAL RETINAL ARTERY OCCLUSIN C.R.A.O

☆ ***Work – up :***

- Immediate ESR.

☆ ***Treatment :***

- Start immediately after the Dx. Is made before the work-up, if the CRAO has been present < 24 hours.

a. Ocular Massage

b. A / C Paracentesis

CENTRAL RETINAL VEIN OCCLUSION C.R.V.O

☆ **Symptoms :**

- Painless Loss of Vision

☆ **Signs :**

-Haemorrhage & Exudation

☆ **Etiology :**

- Arteiosclerosis of the adjacent CRA.

-Hypertension

- Optic Disc edema

CENTRAL RETINAL VEIN OCCLUSION C.R.V.O

☆ ***Etiology :***

- *Glaucoma*
- *Optic Disc Drusen*
- *Hypercoagulation State (e.g. Polycethemia)*
- *Vasculitis (e.g. Sarcoid)*
- *Drugs*

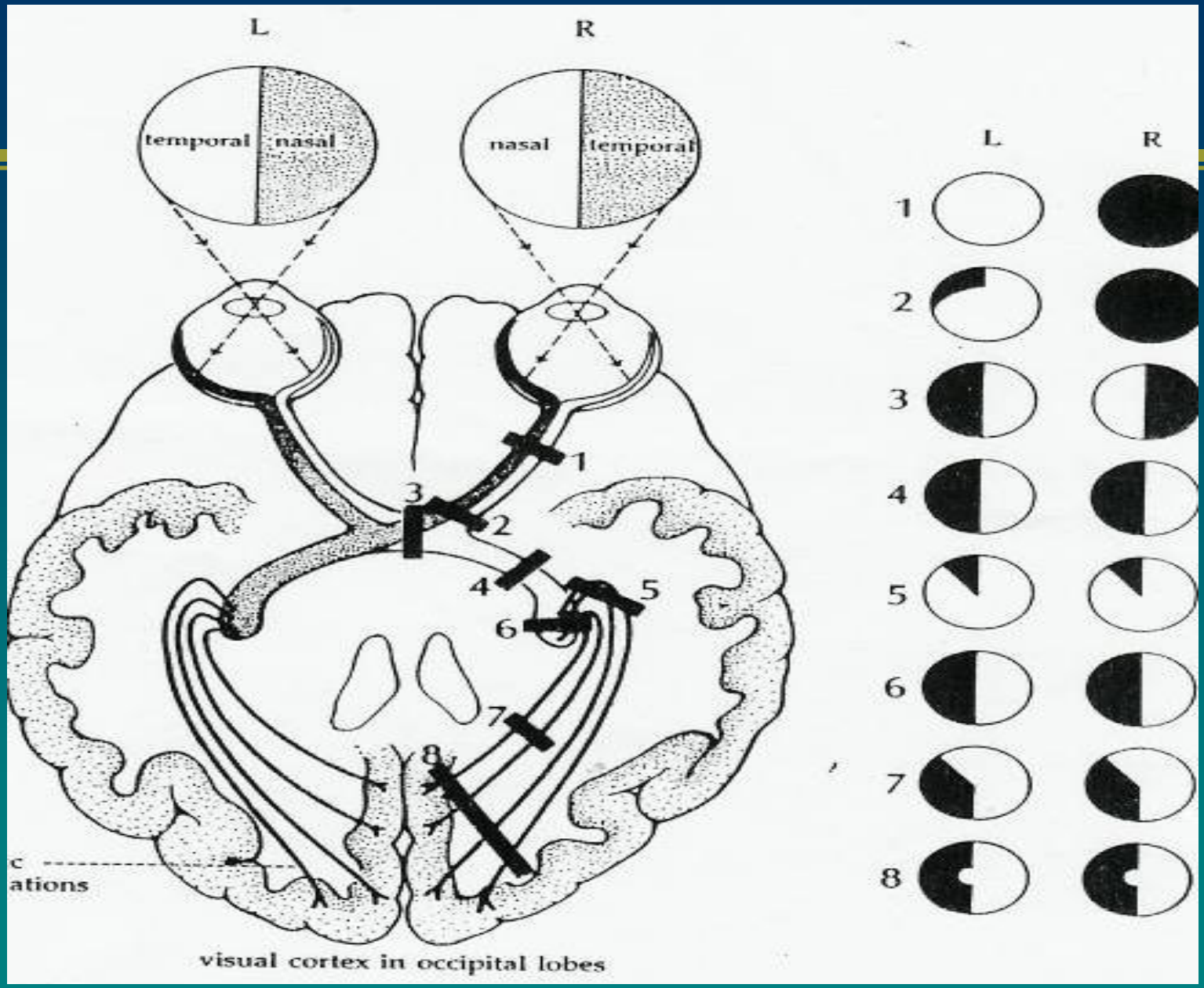
CENTRAL RETINAL VEIN OCCLUSION C.R.V.O

☆ **Work – up :**

- Complete Ocular Examination
- Complete medical evaluation

☆ **Treatment :**

-No specific immediate treatment
- Treat underline cause
- laser for persistent macular edema if indicated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visual cortex in occipital lobes

CENTRAL RETINAL ARTERY OCCLUSION
C.R.A.O

☆ **Symptoms :**

- Sudden painless loss of vision

☆ **Signs :**

- Opaque retina : Cherry red macula

CENTRAL RETINAL ARTERY OCCLUSION C.R.A.O

☆ **Etiology :**

- Emboli
- Thrombus
- GCA
- Collagen Vascular Disease (e.g. SLE)
- Hypercoagulation Disease (e.g. Polycethemia)
- Rare – migraine , Tumor

CENTRAL RETINAL ARTERY OCCLUSION C.R.A.O

☆ ***Work – up :***

- Immediate ESR.

☆ ***Treatment :***

- Start immediately after the Dx. Is made before the work- up ,if the CRAO has been present < 24 hour

a. ***Ocular Massage***
b. ***A/C Paracentesis***

CENTRAL RETINAL VEIN OCCLUSION C.R.V.O

- ***Symptoms :***

  - Painless Loss of Vision

- ***Signs :***

  - Haemorrhage & Exudation

CENTRAL RETINAL VEIN OCCLUSION C.R.V.O

- ***Etiology :***

- Arteriosclerosis of the adjacent CRA.

-Hypertension

- Optic Disc edema

- Glaucoma

- Optic Disc Drusen

- Hyoercoagulation State(e.g. Polycethemia)

- Vasculitis (e.g. Sarcoid)

- Drugs

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- Complete Ocular Examination

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☆ ***Treatment :***

- No specific immediate treatment.

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ACUTE VISUAL LOSS

HOW THE VISION FORMED

TWO SYSTEM

- OPTICAL (ANATOMICAL) SYSTEM

- VISUAL PATHWAY SYSTEM

OPTICAL (ANATOMICAL)

SYSTAM

A .CORNEA

B . LENS

C . A / C

D .VITREOUS

VISUAL PAHWAY SYSTAM

- RETINA
- OPTIC N
- OPTIC TRACT
- OPTIC CHIASM
- OPTIC RADIATION
- OCCIPITAL REGION

ACUTE VISUAL LOSS

HOW THE VISION LOST

ACUTE VISUAL LOSS OPTCAL /ANATOMICAL

- CORNEA
- A/C
- LENS
- VITREOUS ARE MOST COMMON

ACUTE VISUAL LOSS VISUAL PATHWAY

- RETINA
- OPTIC NERVE
- REST OF VISUAL PATHWAY

ACUTE VISUAL LOSS

SUDDEN, MINUTES,
HOURS OR FEW DAYS

TEMPORARY VISUAL LOSS

- FEW SECONDS __ PAPILLEDEMA
- 1-10 MINUTES __ T.I.A.
- 10-60 MINUTES __ MIGRAIN H/A

PERMANENT VISUAL LOSS

DOESN'T RECOVER BY ITSELF

OPTICAL PATHWAY/ANATOMICAL

- CORNEA
- A/C
- LENS
- VITREOUS

PERMANENT VISUAL LOSS

- **VISUAL PATHWAY WAY**

1.RETINAL CAUSES ‘ MOST COMMON”

2.OPTIC NERVE

3.OPTIC TRACT,CHIASM,RADIATION AND OCCIPITAL.