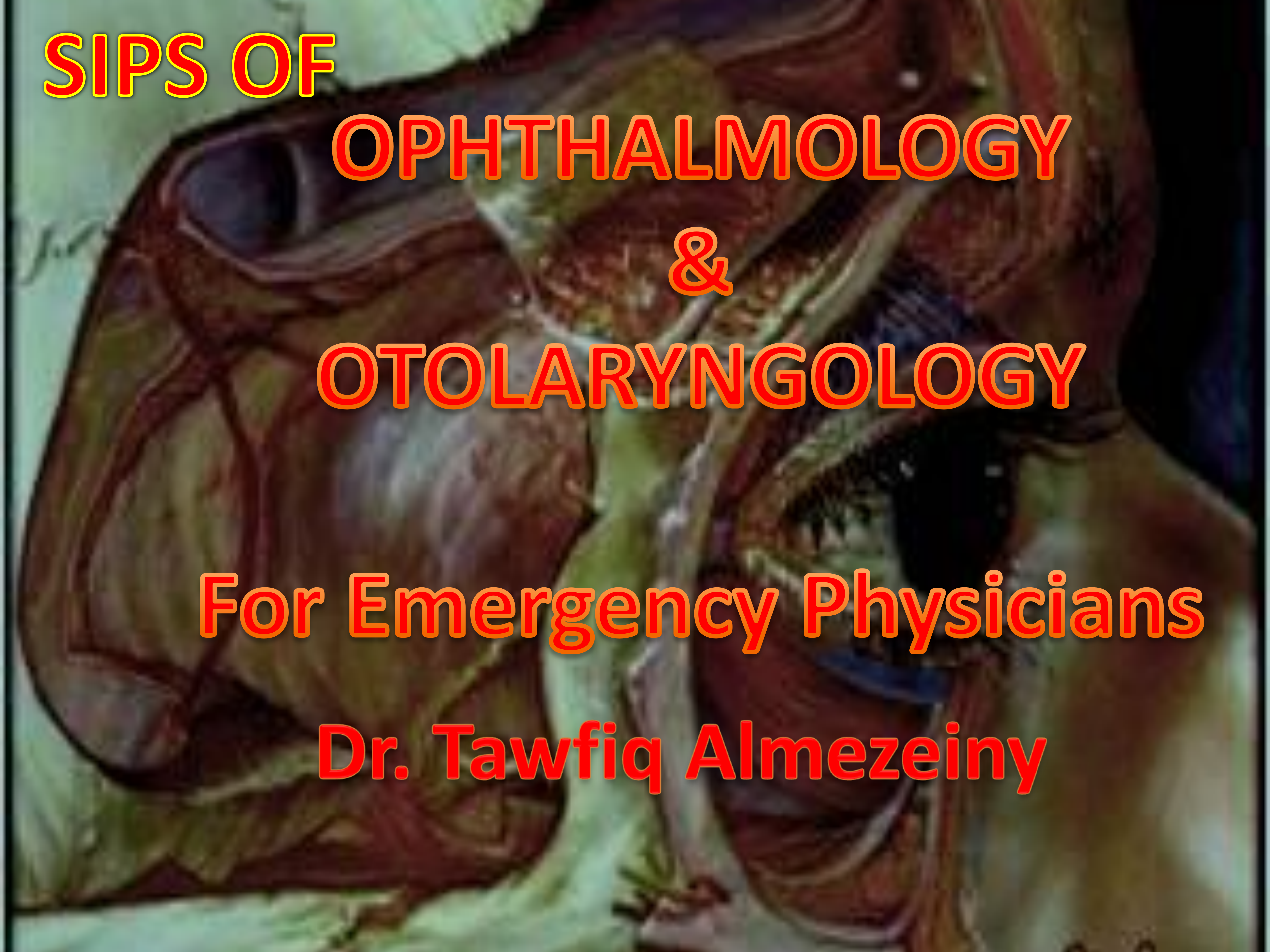
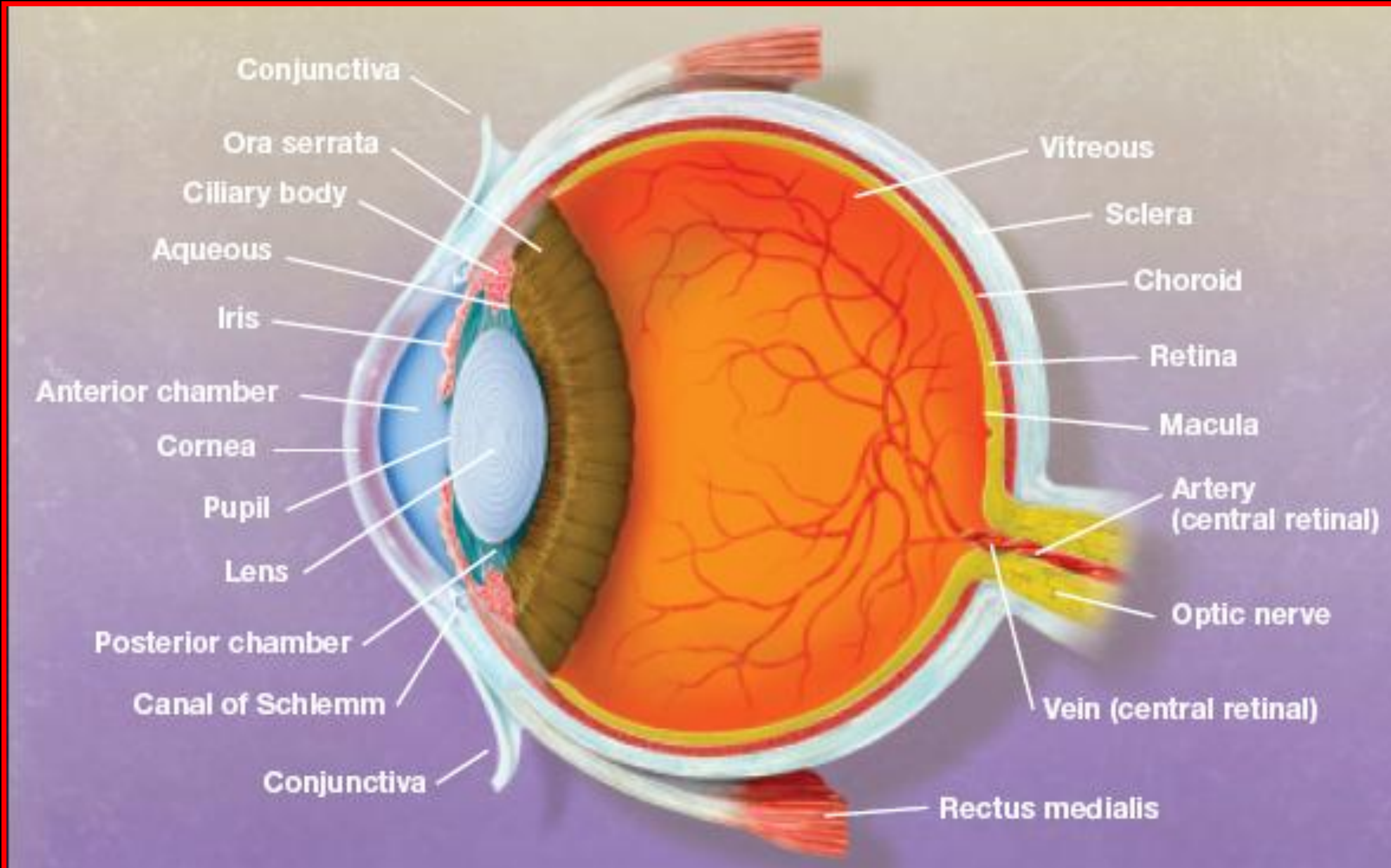


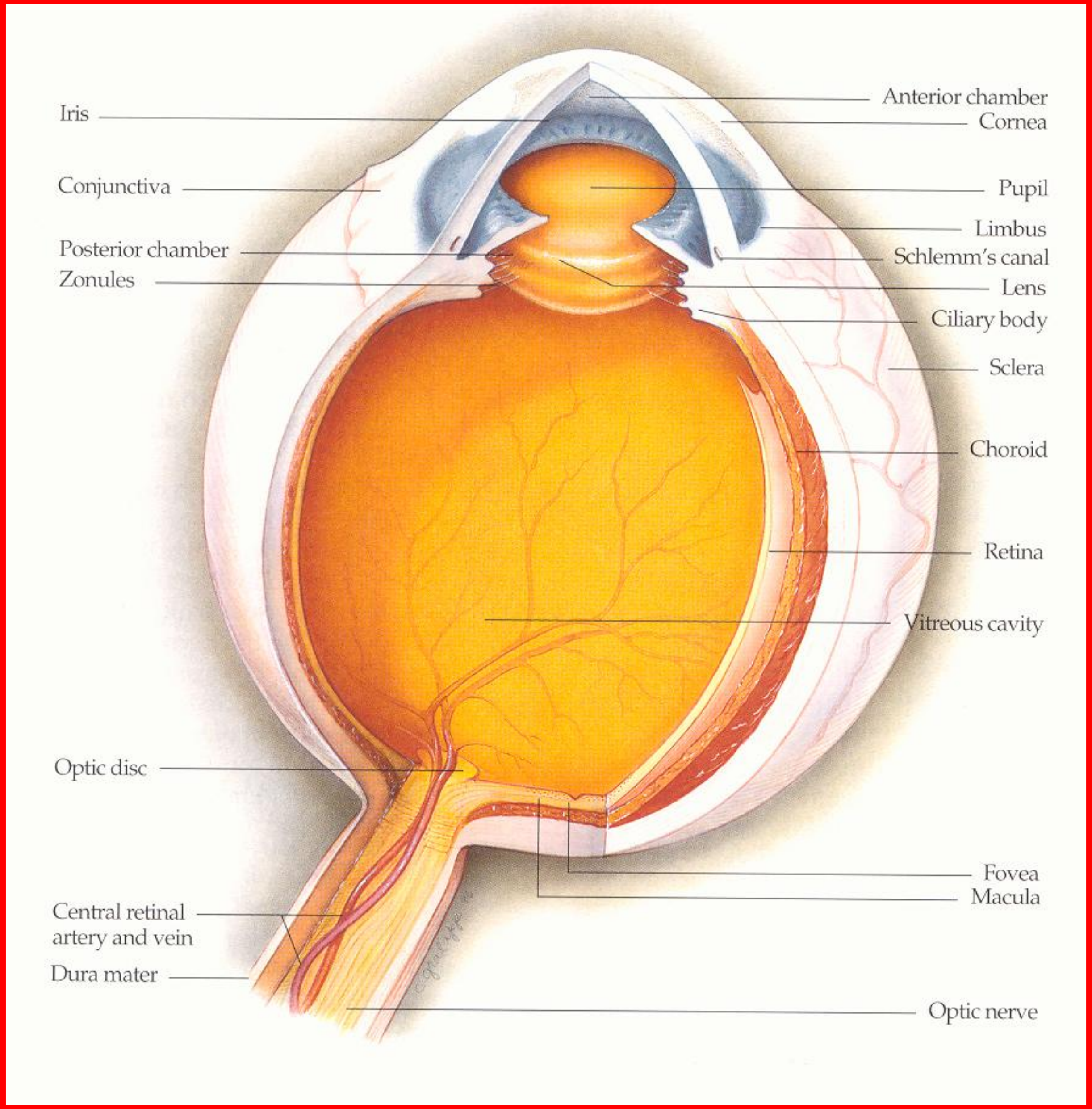
SIPS OF OPHTHALMOLOGY & OTOLARYNGOLOGY

For Emergency Physicians

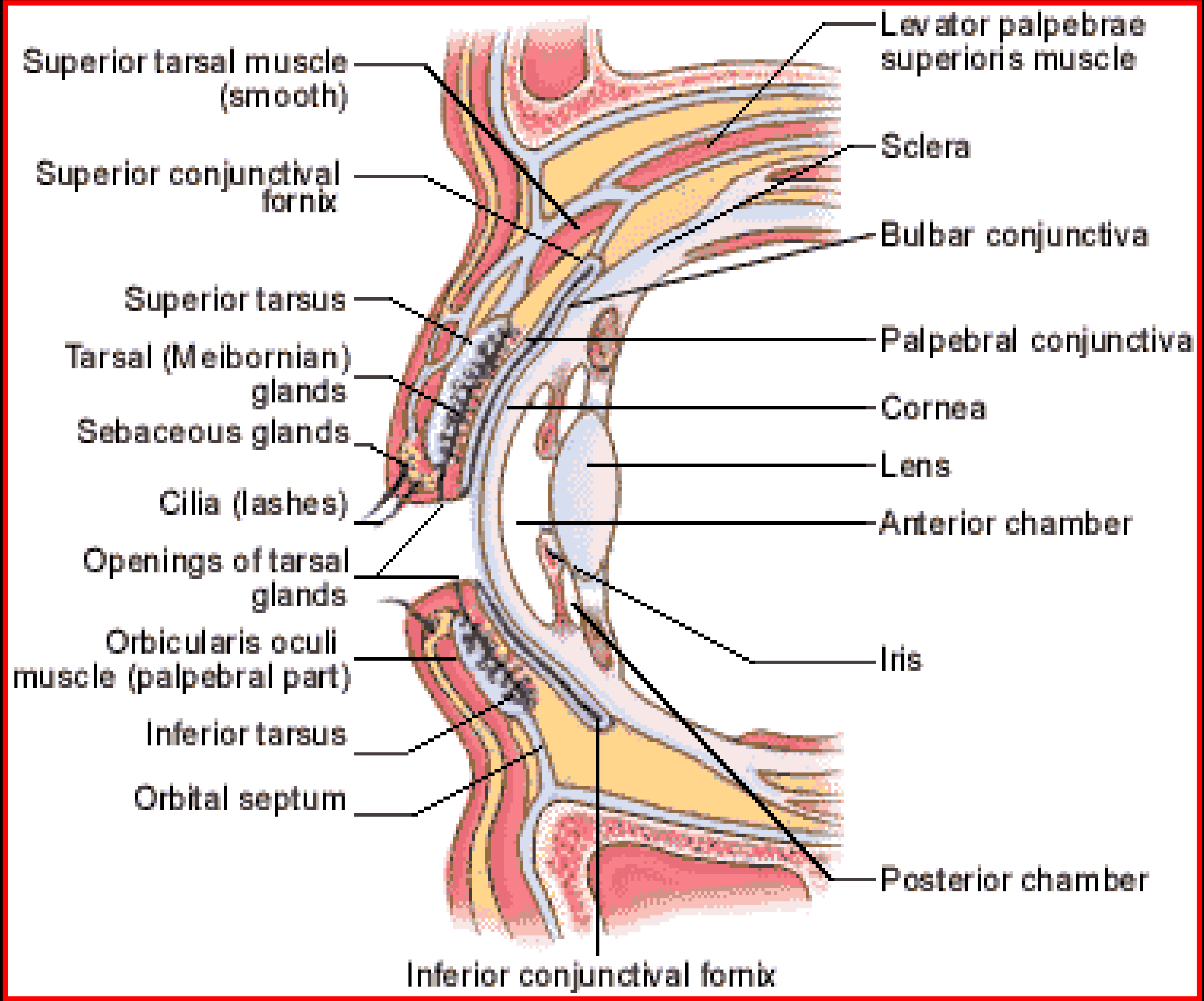
Dr. Tawfiq Almezeiny



Conjunctiva
Ora serrata
Ciliary body
Aqueous
Iris
Anterior chamber
Cornea
Pupil
Lens
Posterior chamber
Canal of Schlemm
Conjunctiva
Vitreous
Sclera
Choroid
Retina
Macula
Artery
(central retinal)
Optic nerve
Vein (central retinal)
Rectus medialis



Anterior chamber
Cornea
Iris
Conjunctiva
Pupil
Limbus
Posterior chamber
Schlemm's canal
Zonules
Lens
Ciliary body
Sclera
Choroid
Retina
Vitreous cavity
Optic disc
Fovea
Macula
Central retinal artery and vein
Dura mater
Optic nerve


Superior tarsal muscle (smooth)
Superior conjunctival fornix
Superior tarsus
Tarsal (Meibornian) glands
Sebaceous glands
Cilia (lashes)
Openings of tarsal glands
Orbicularis oculi muscle (palpebral part)
Inferior tarsus
Orbital septum
Inferior conjunctival fornix
Levator palpebrae superioris muscle
Sclera
Bulbar conjunctiva
Palpebral conjunctiva
Cornea
Lens
Anterior chamber
Iris
Posterior chamber

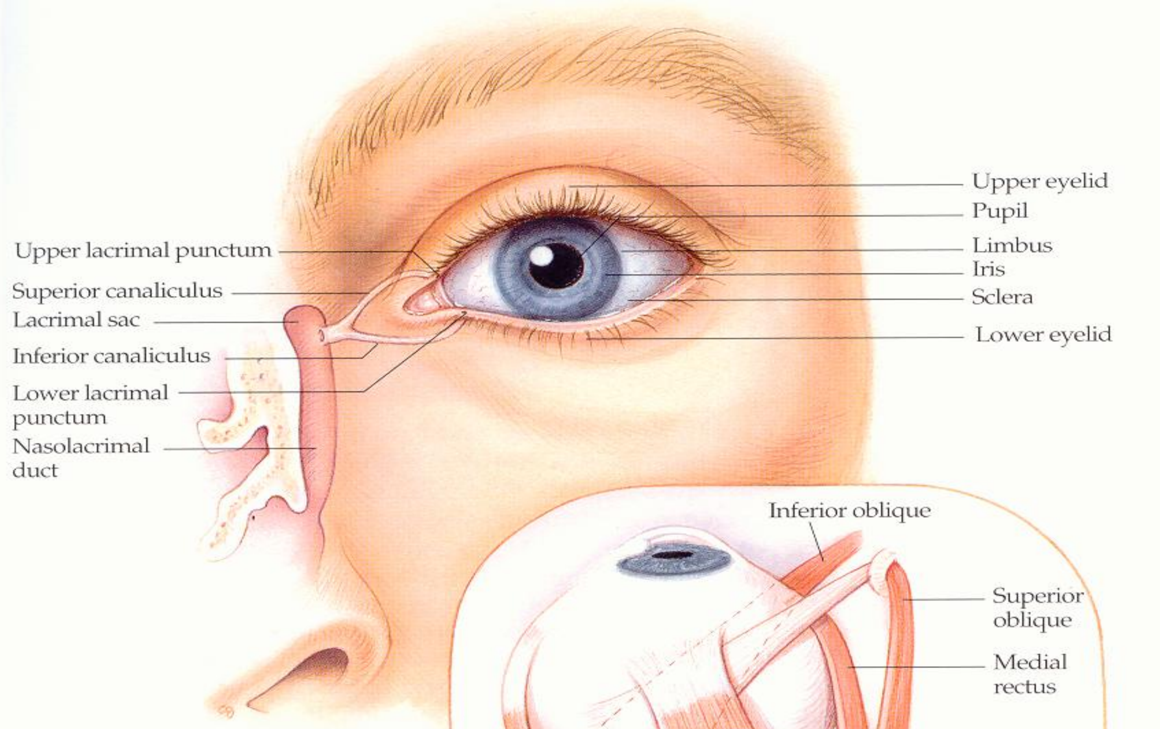


Figure 1.2 External landmarks.
(Courtesy Christine Gralapp.)

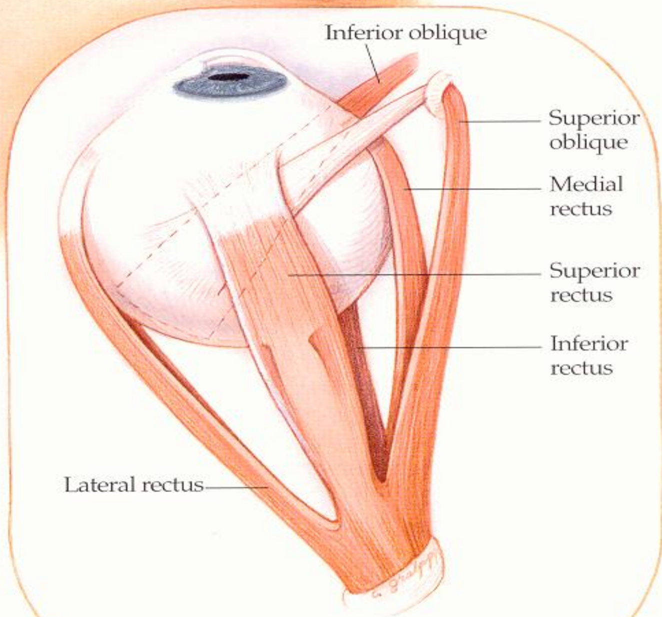
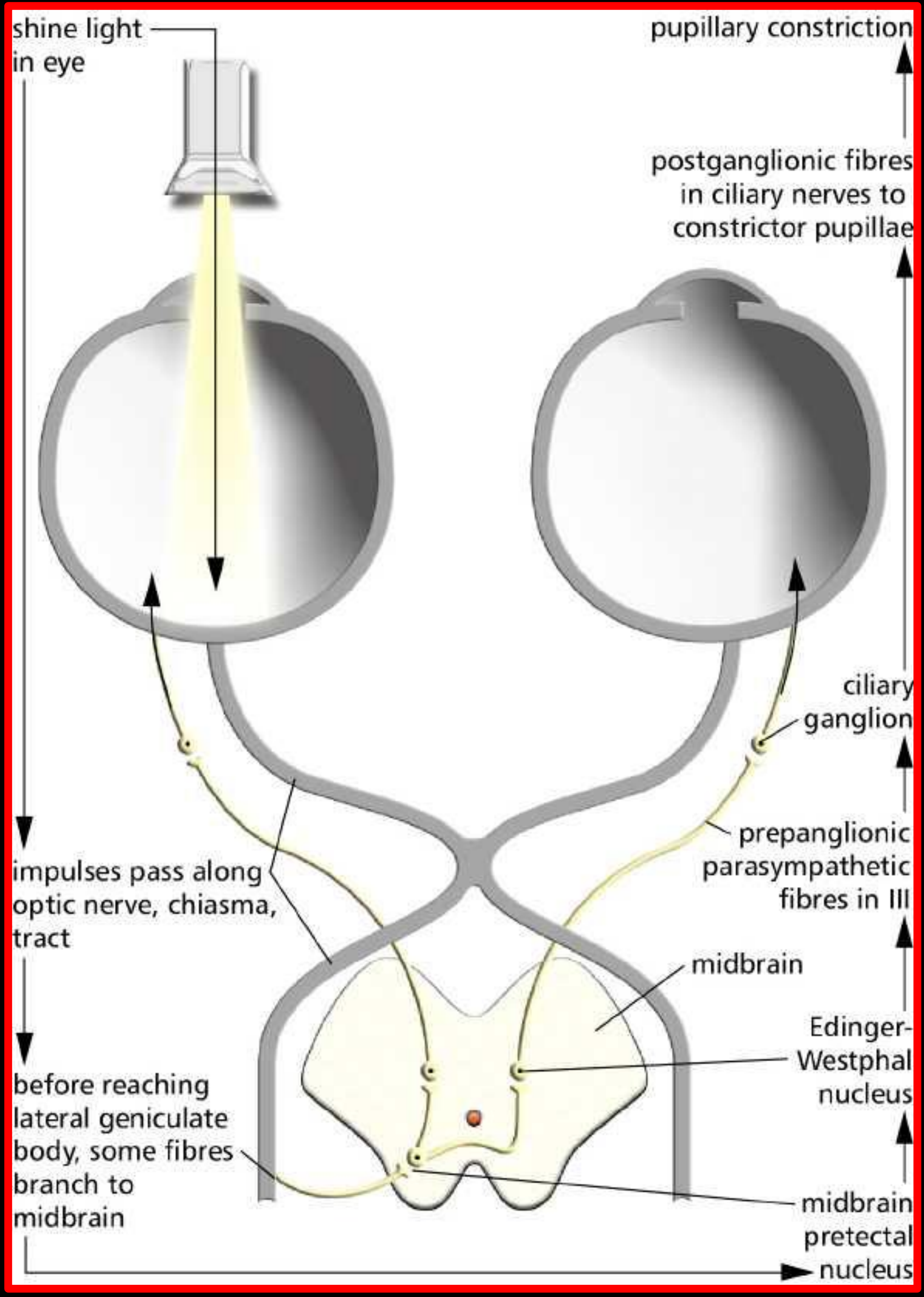
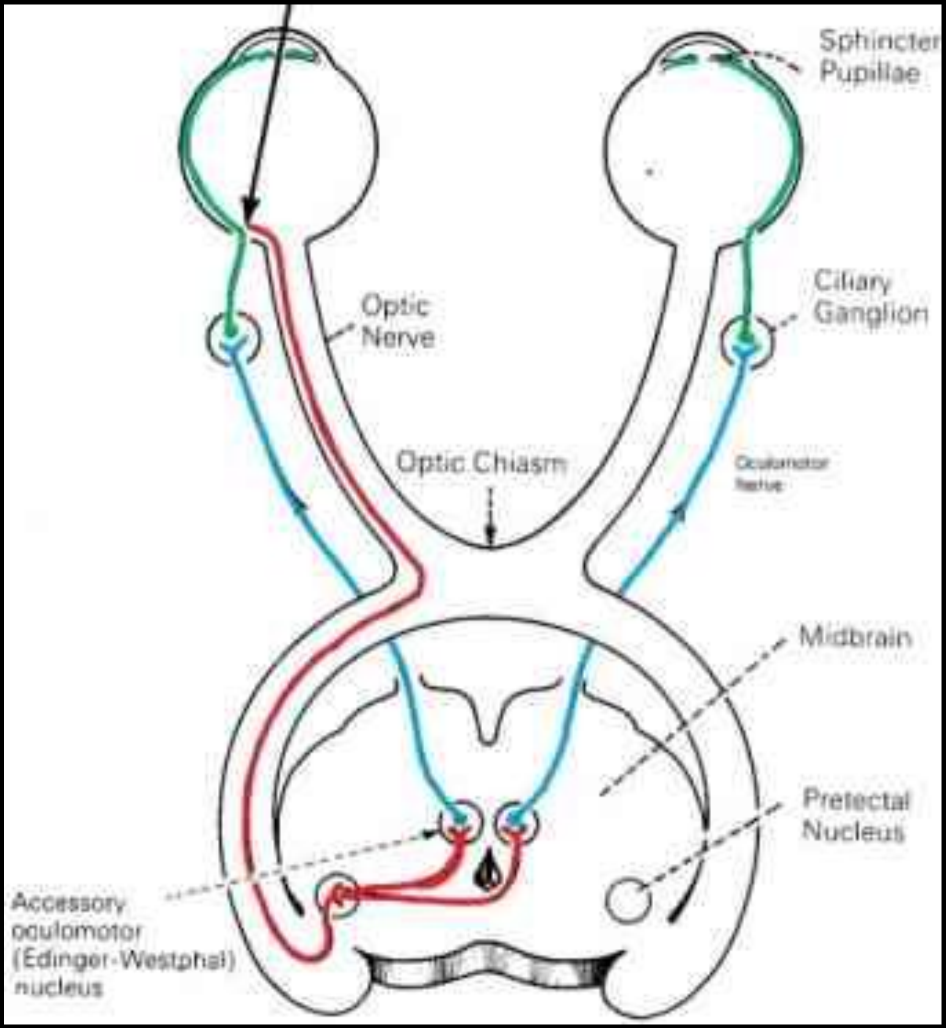
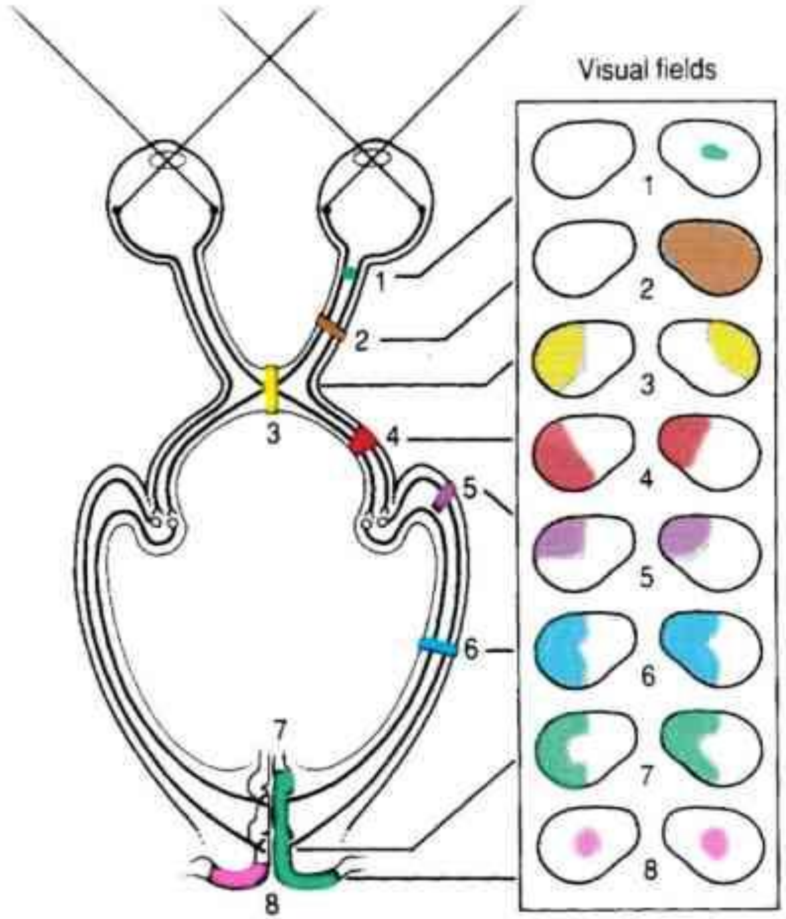


Figure 1.3 Extraocular muscles.
(Courtesy Christine Gralapp.)


shine light in eye
pupillary constriction
postganglionic fibres in ciliary nerves to constrictor pupillae
ciliary ganglion
prepanglionic parasympathetic fibres in III
midbrain
Edinger-Westphal nucleus
midbrain pretectal nucleus
impulses pass along optic nerve, chiasma, tract
before reaching lateral geniculate body, some fibres branch to midbrain

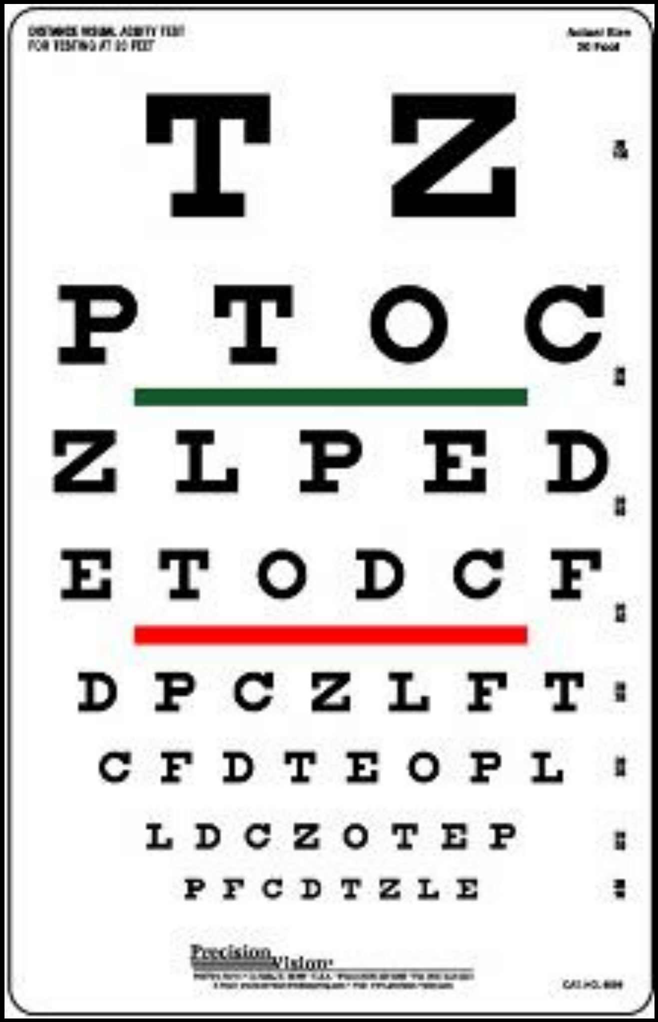

Sphincter
Pupillae
Ciliary
Ganglion
Optic
Nerve
Optic Chiasm
Midbrain
Pretectal
Nucleus
Accessory
oculomotor
(Edinger-Westphal)
nucleus

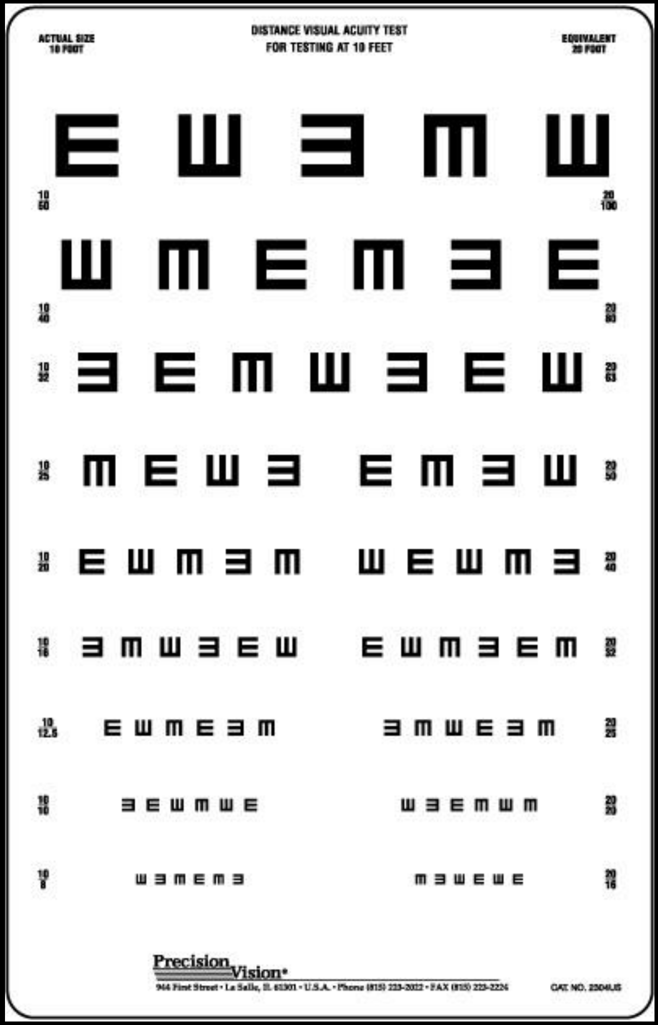


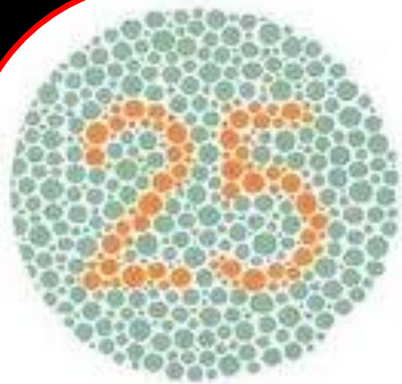
Visual field defects folowing various lesions of the visual pathways

Eye Exam

- Visual acuity –
- Snellen eye chart, counting fingers, light perception
- CN II – VII –
- Pupils, visual fields, EOMs, facial droop
- Inspection/palpation of eye and surrounding structures - Asymmetry, proptosis, enophthalmos, orbital rim
- Lids/ducts
- Slit lamp – Anterior segment
- Fundoscopy – Posterior segment
- Contraindications to dilation – significant head trauma, suspected rupture, history of glaucoma
- Intraocular pressure - Goldman applanation tonometry, Tonopen


T Z
P T O C
Z L P E D
E T O D C F
D P C Z L F T
C F D T E O P L
L D C Z O T E P
P F C D T Z L E
Precision Vision


ACTUAL SIZE
DISTANCE VISUAL ACUITY TEST
FOR TESTING AT 10 FEET
EQUIVALENT
Precision Vision



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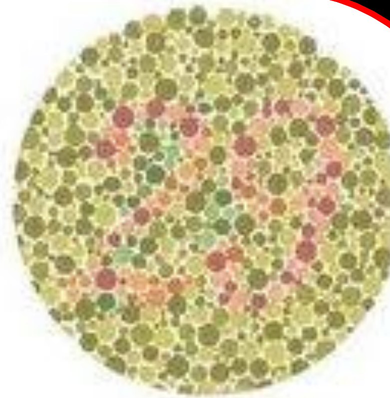

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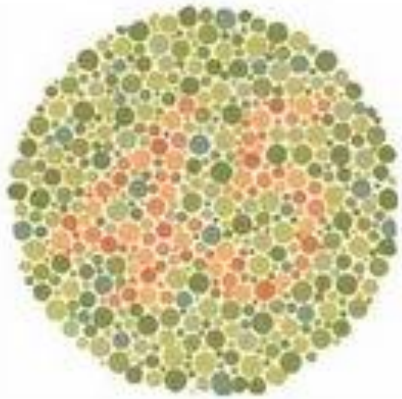

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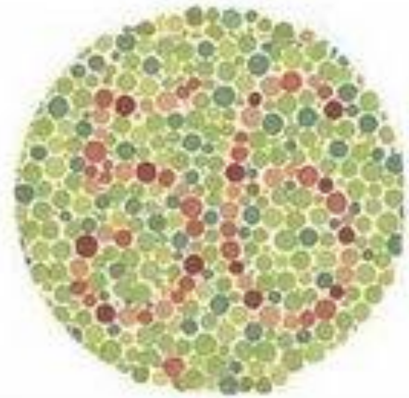

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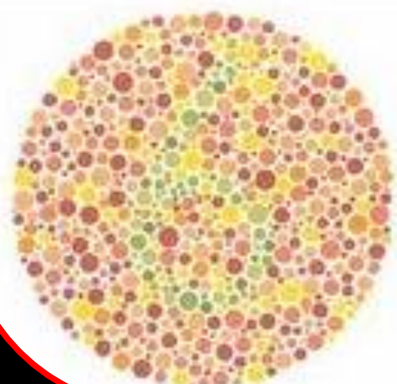

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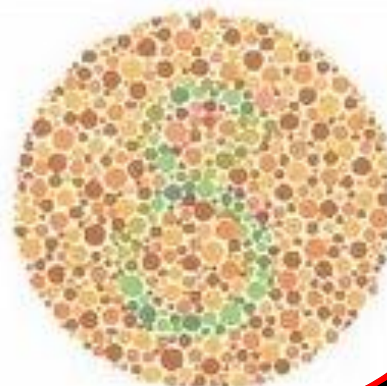

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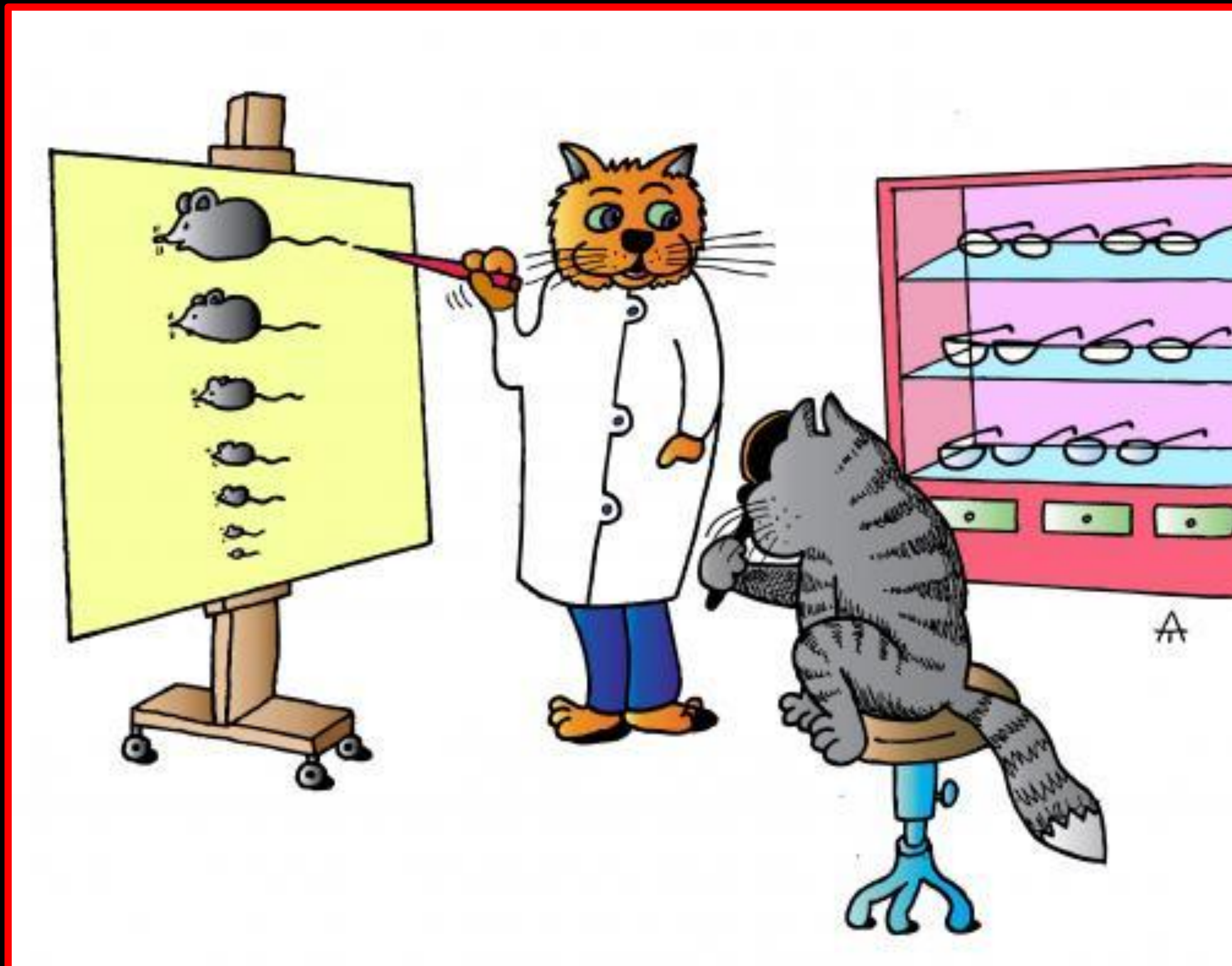

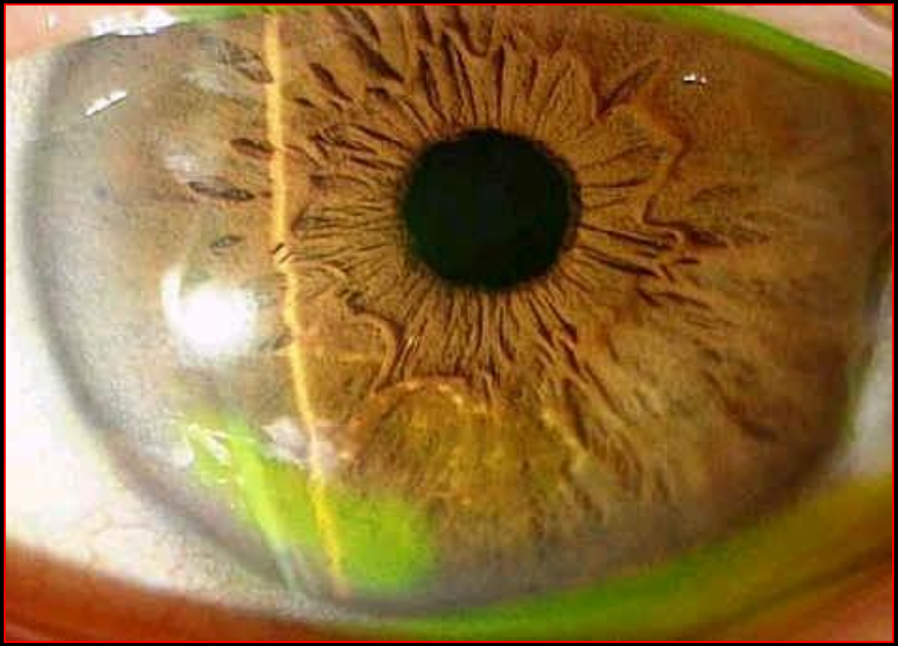

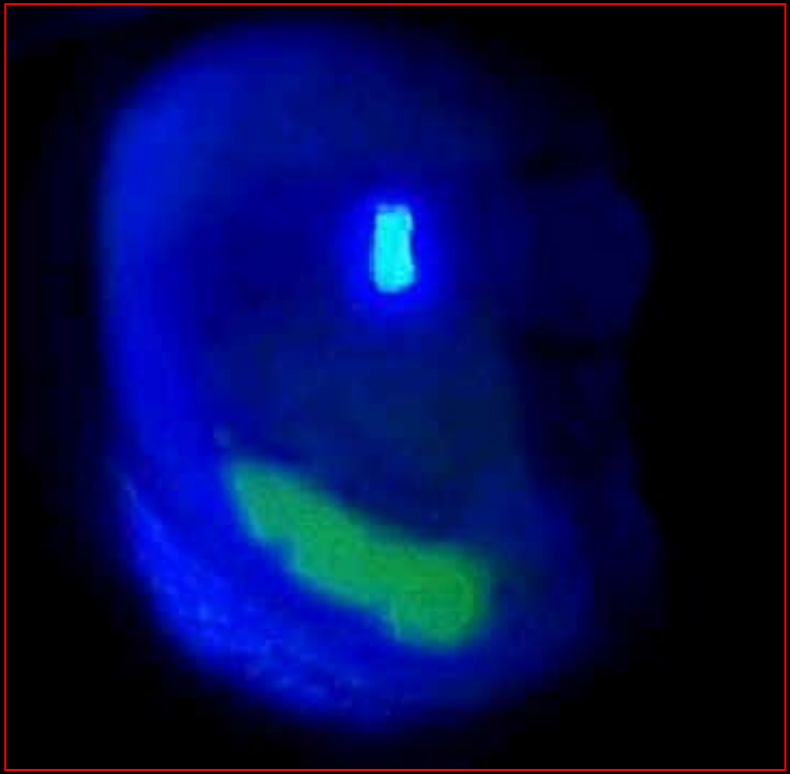

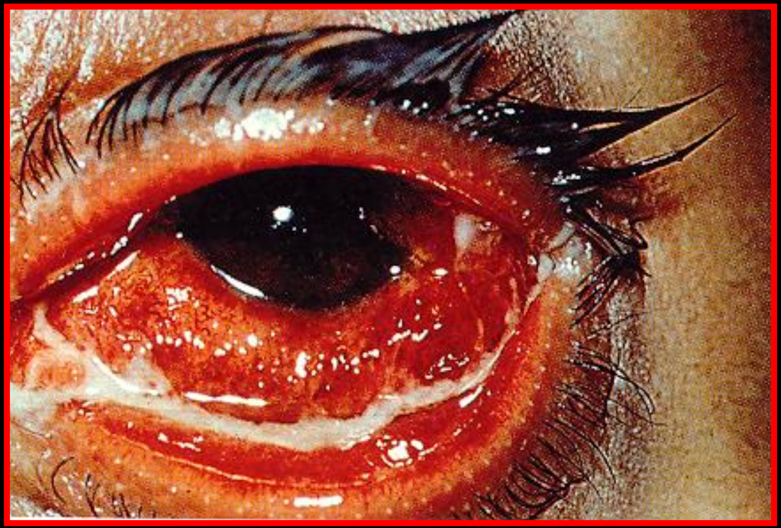


Edward S. Harkness Eye Institute
Columbia University


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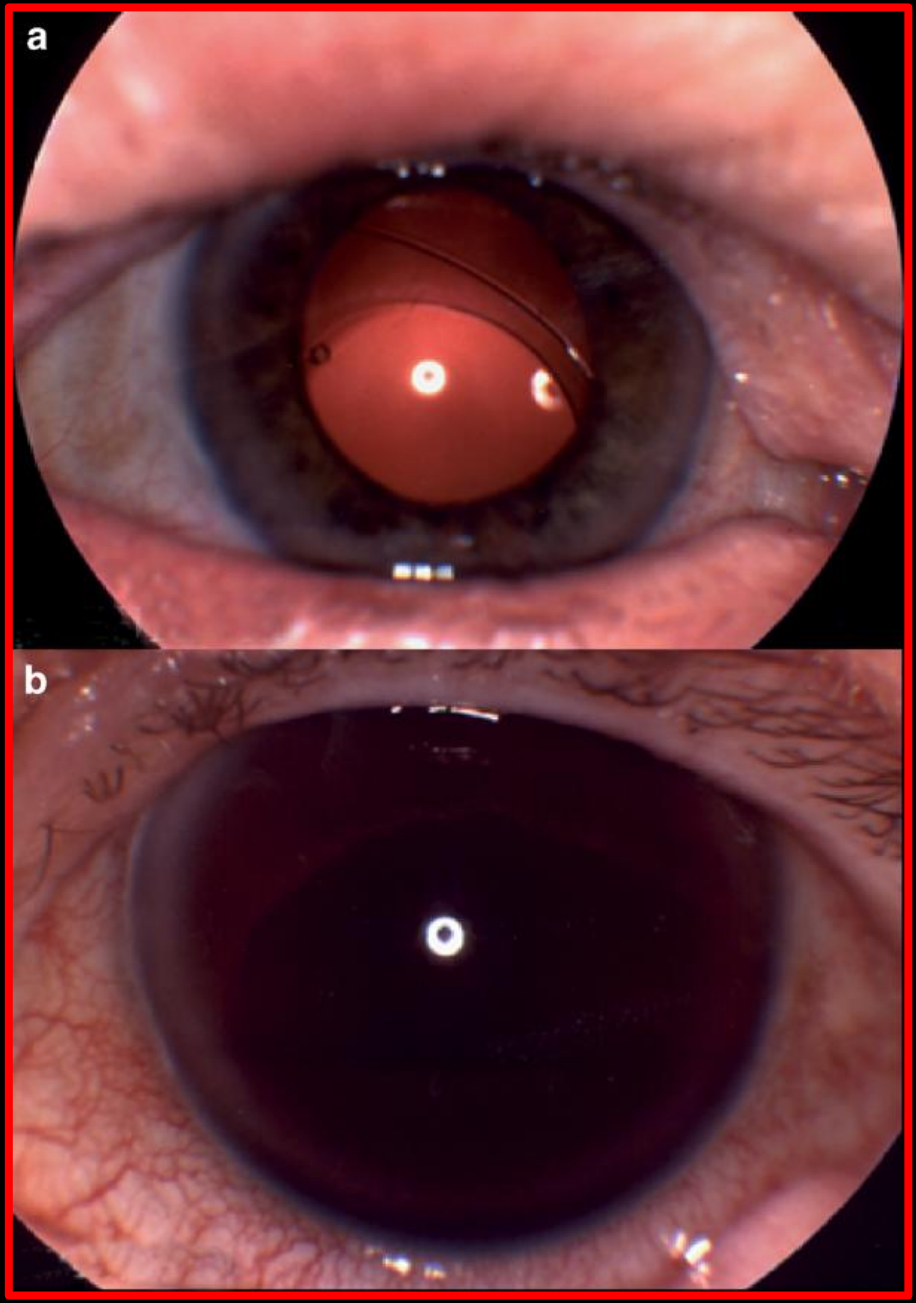
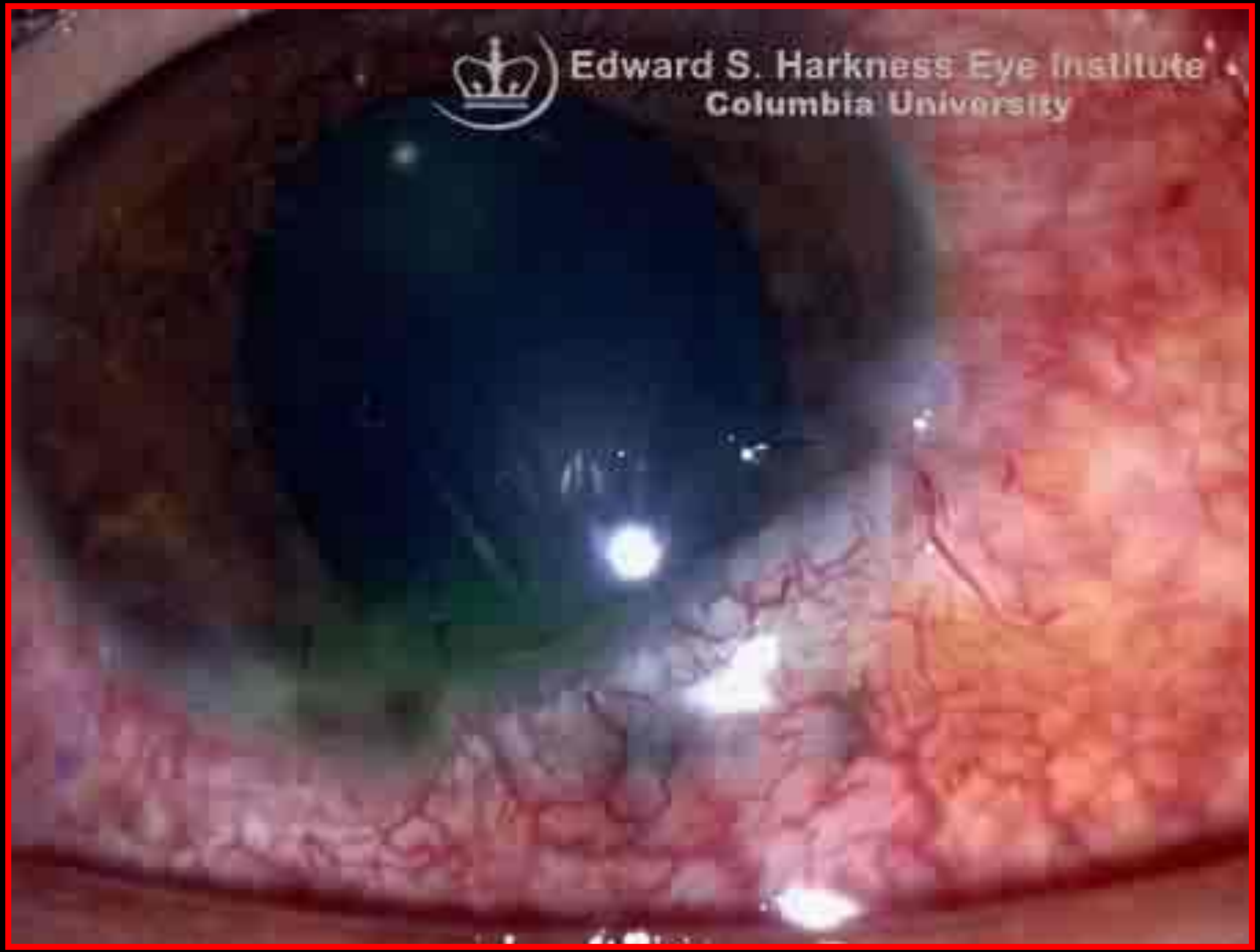

a
b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Advanced Delivery System utilizing BAG-IN-A-CAN™ technology:
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Trigger Activated LED Light
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• temporarily disorients intruder
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• Silver • Blue/Black
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"You need to go to a specialist: a spin doctor."


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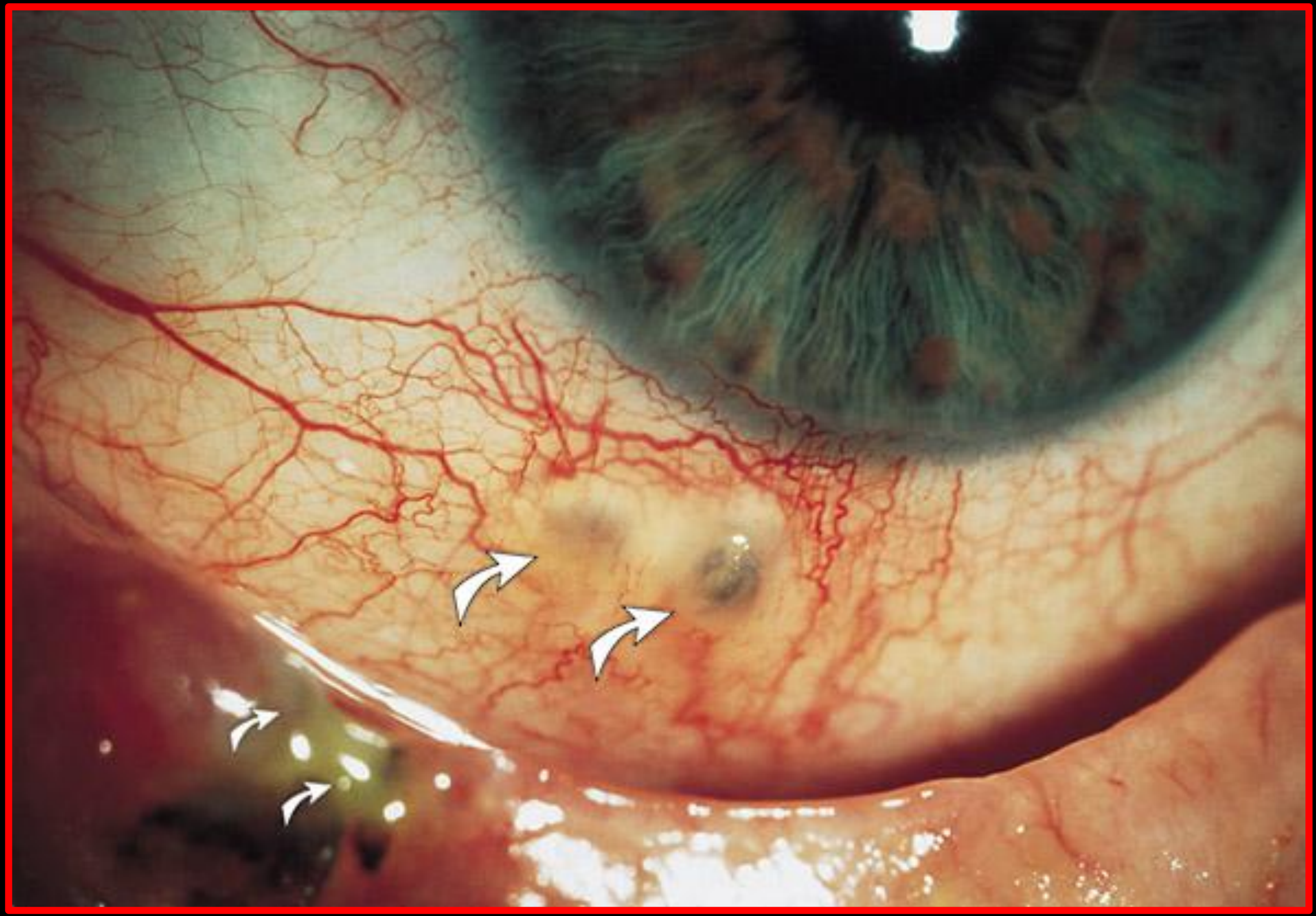
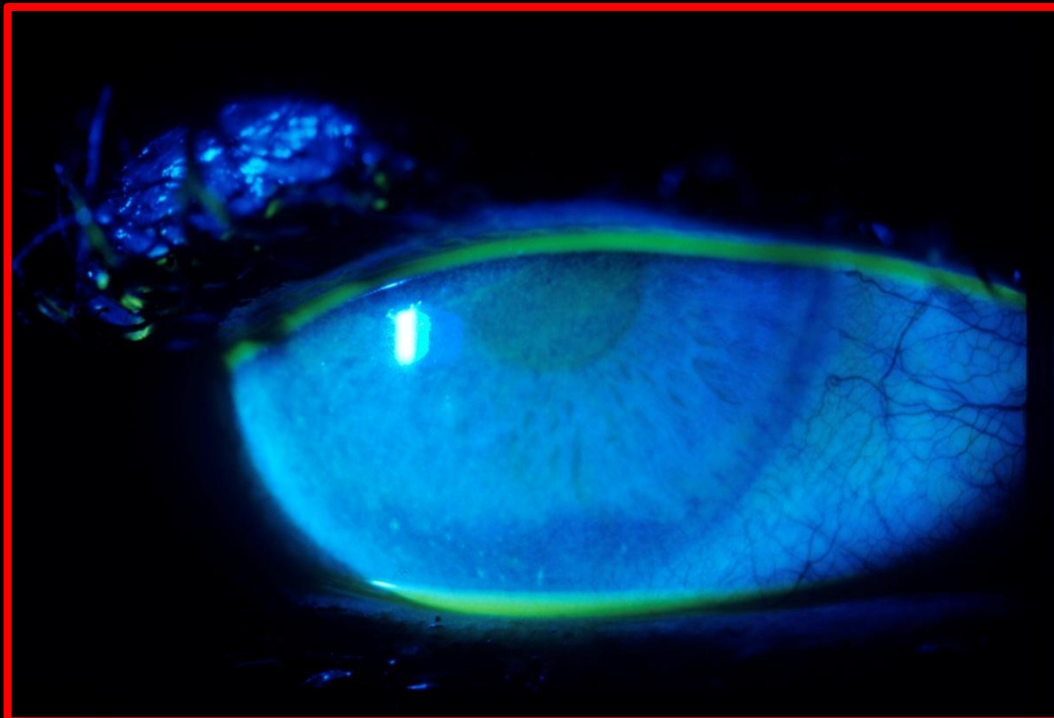
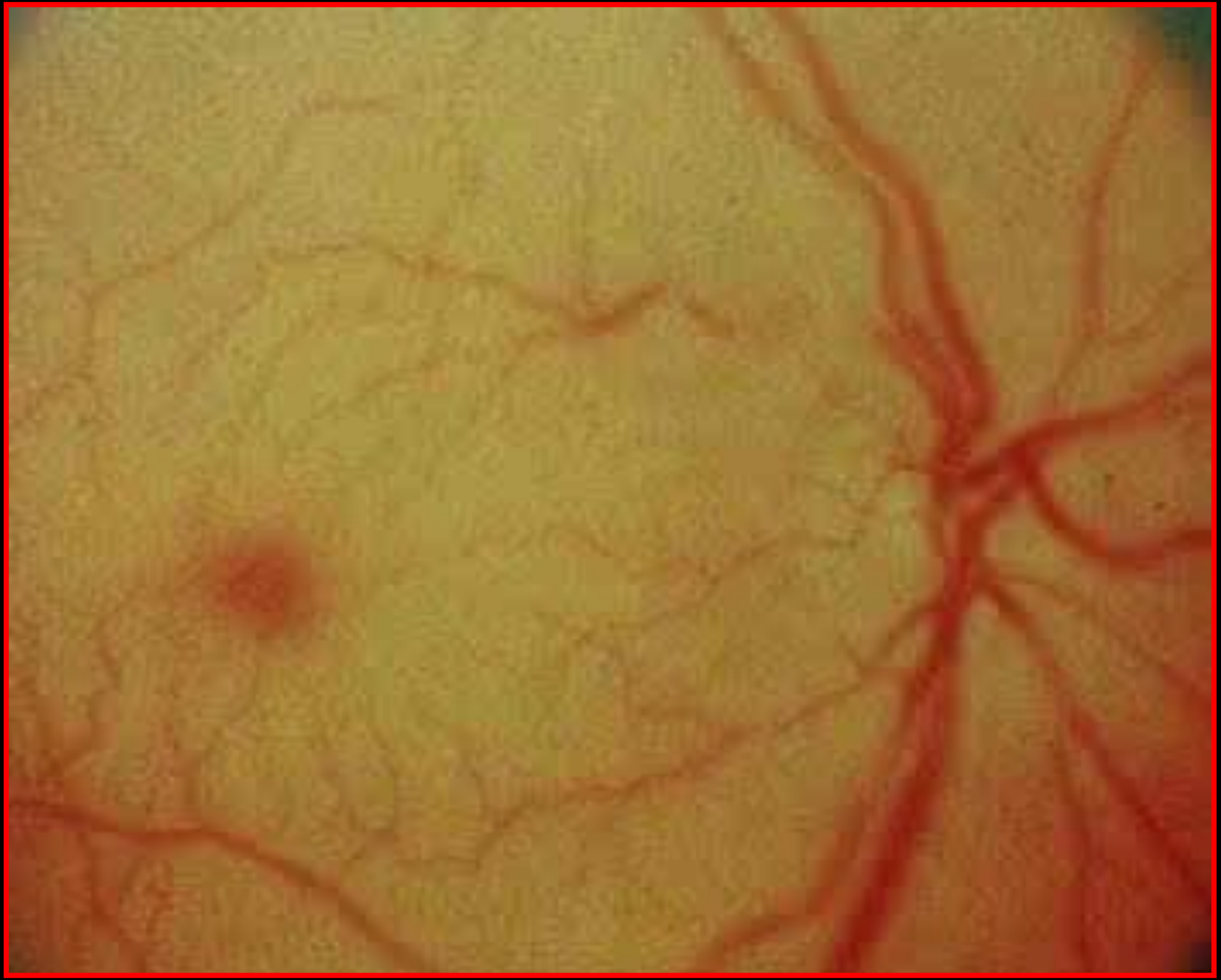
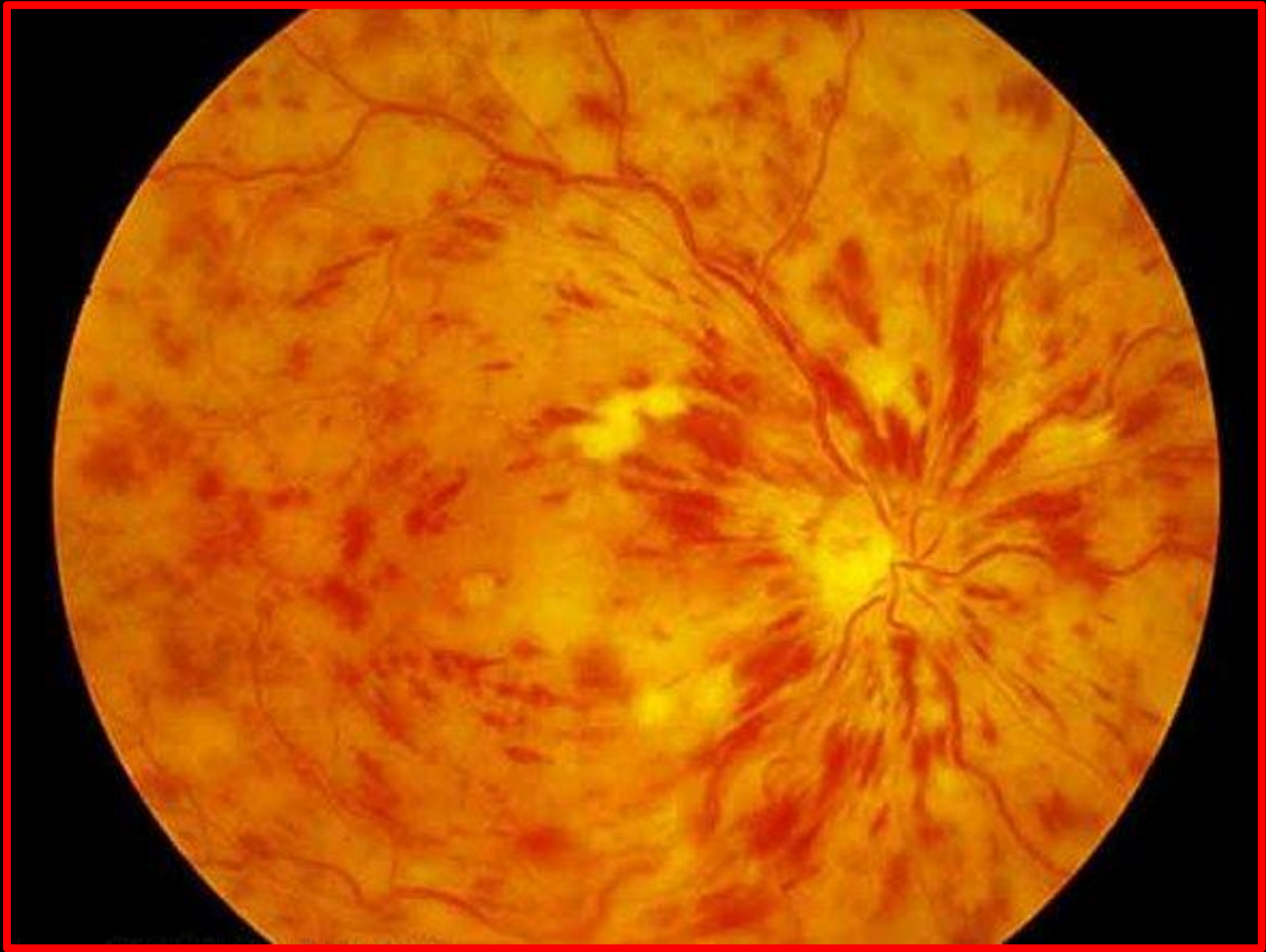
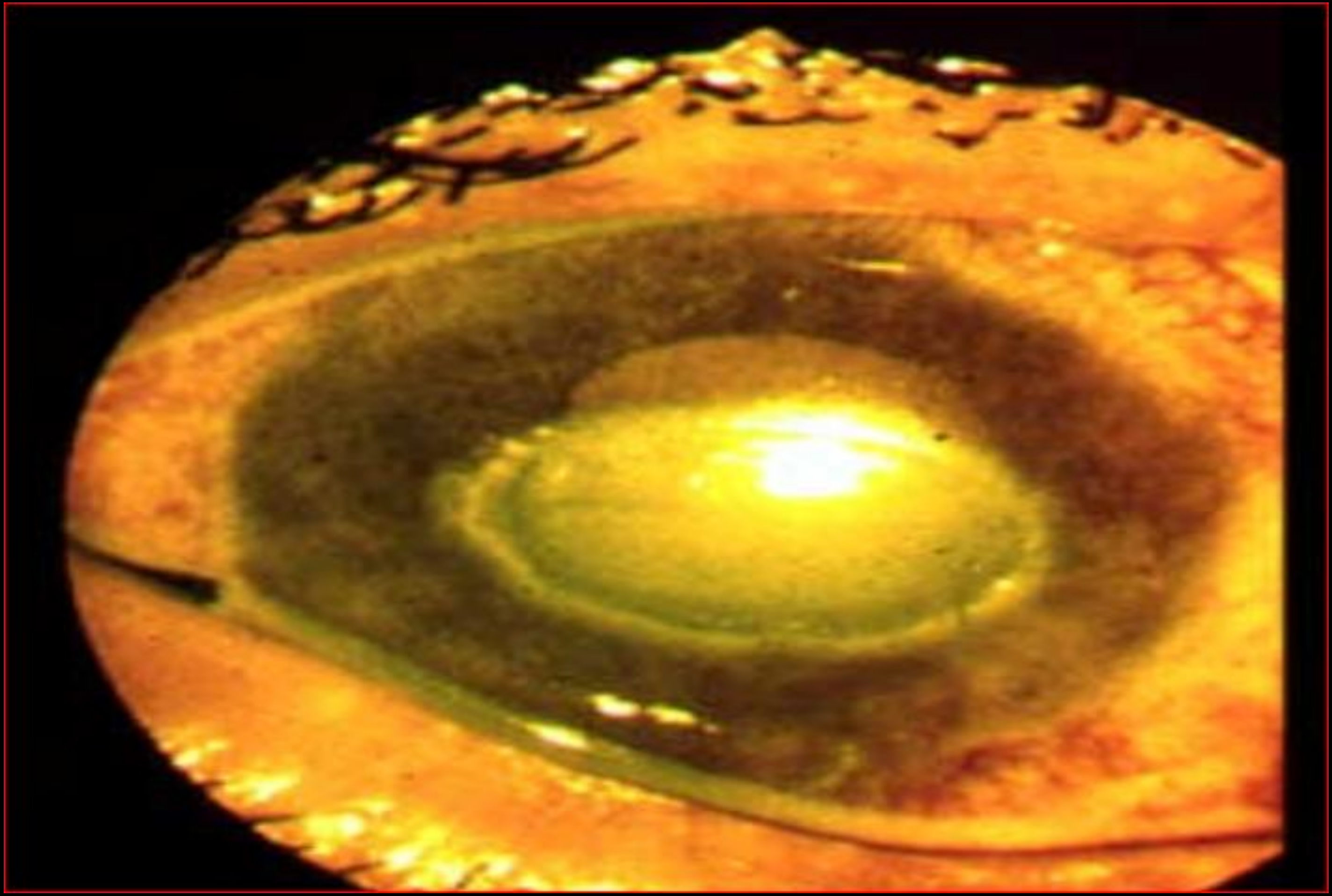
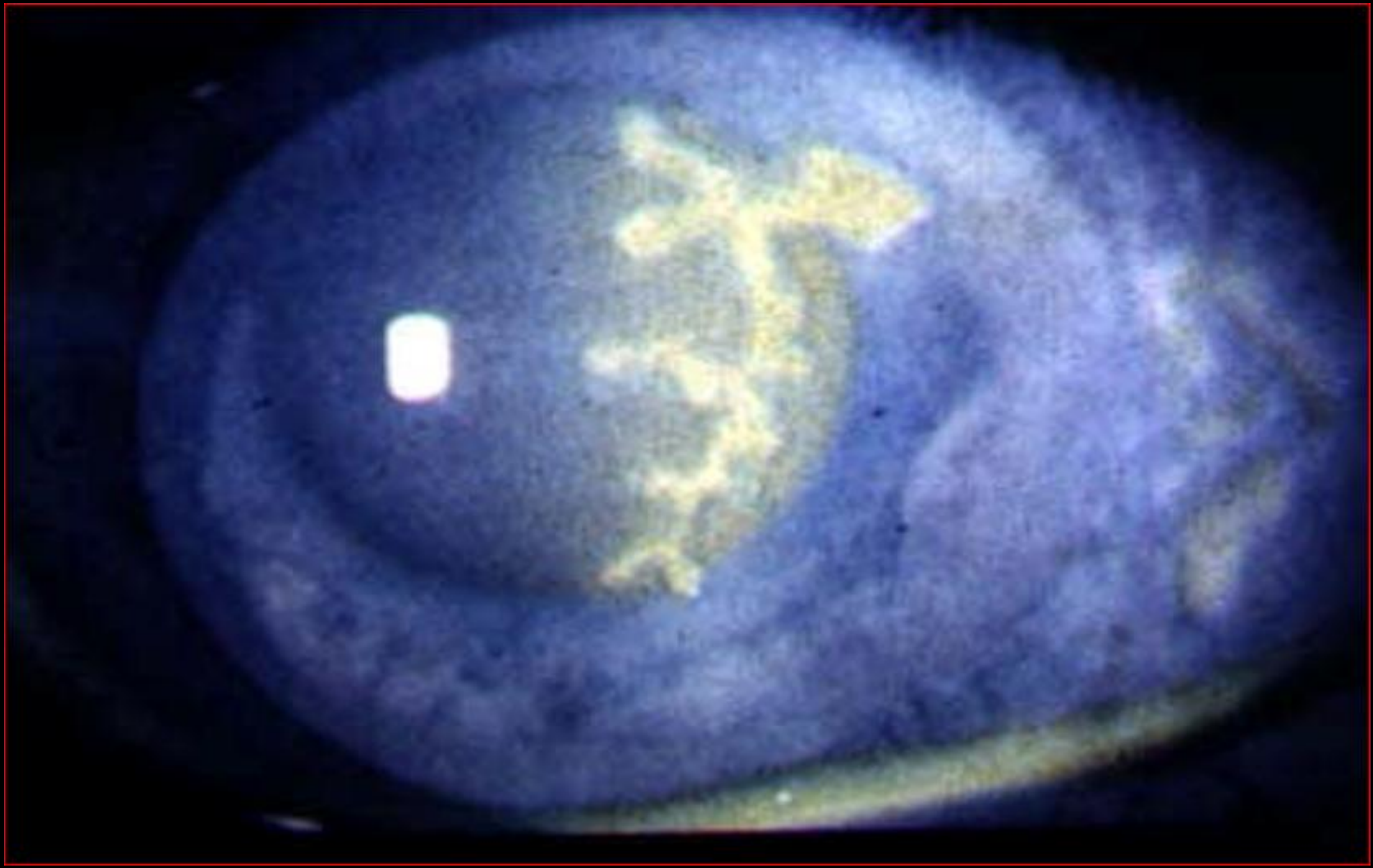


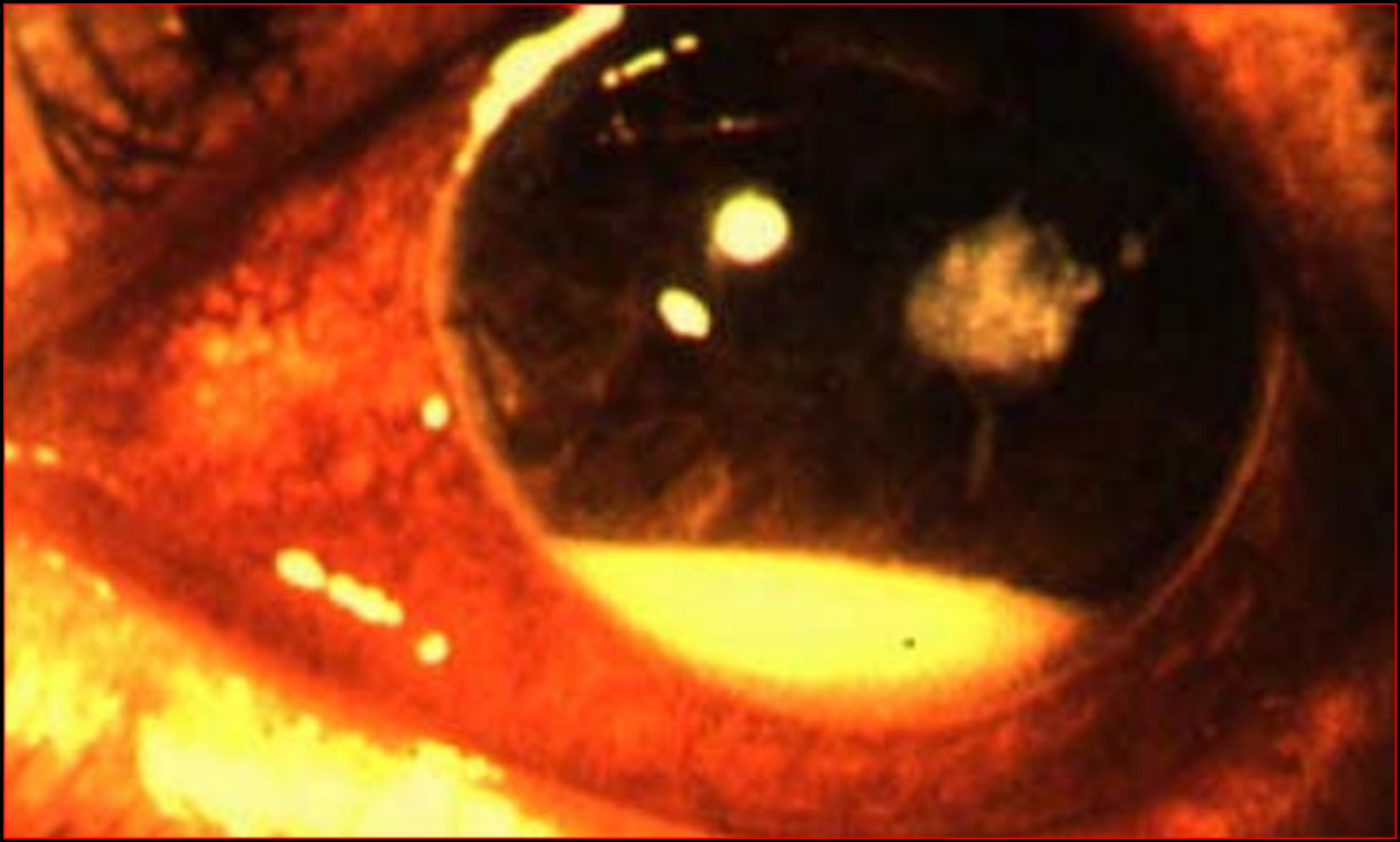


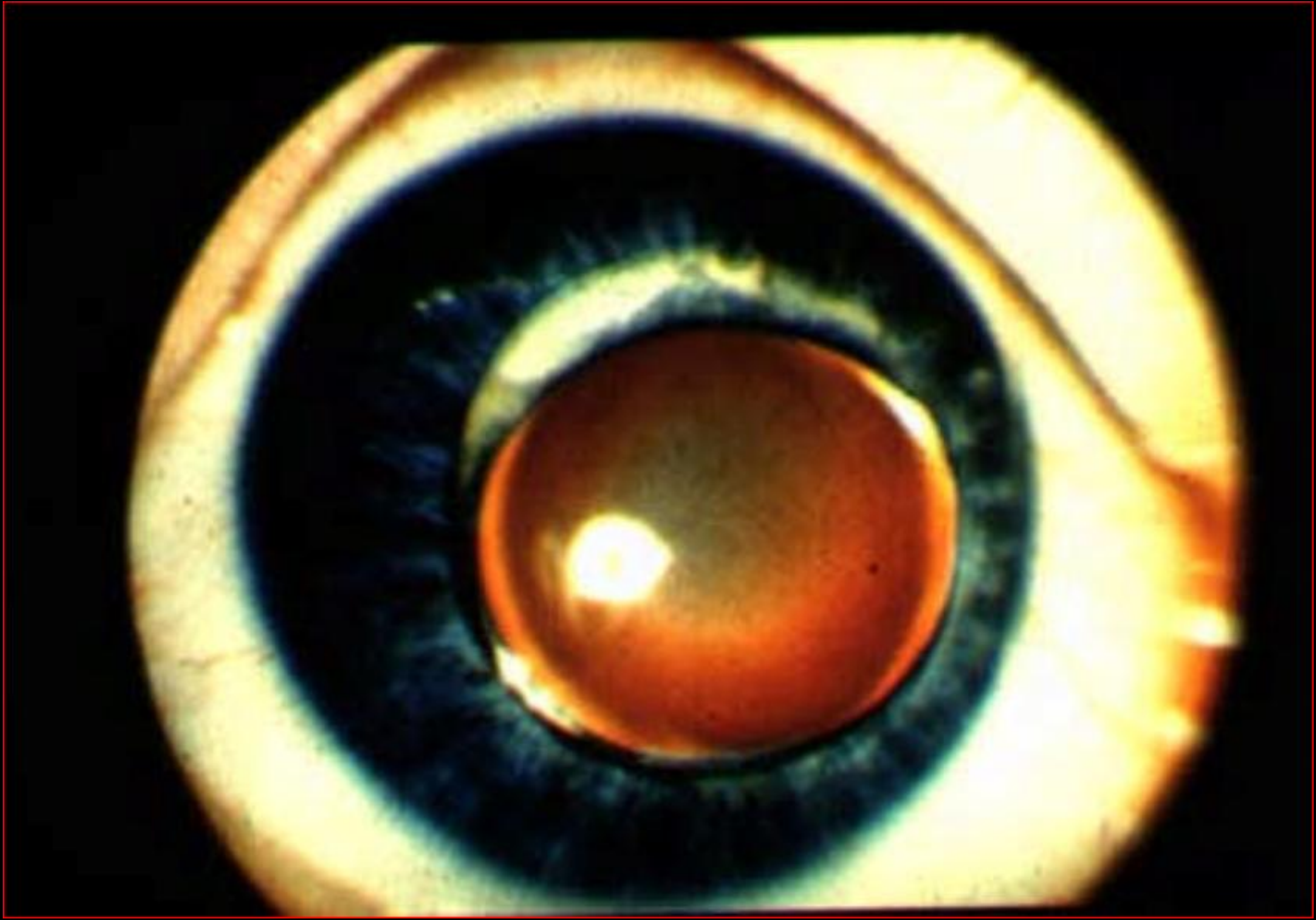




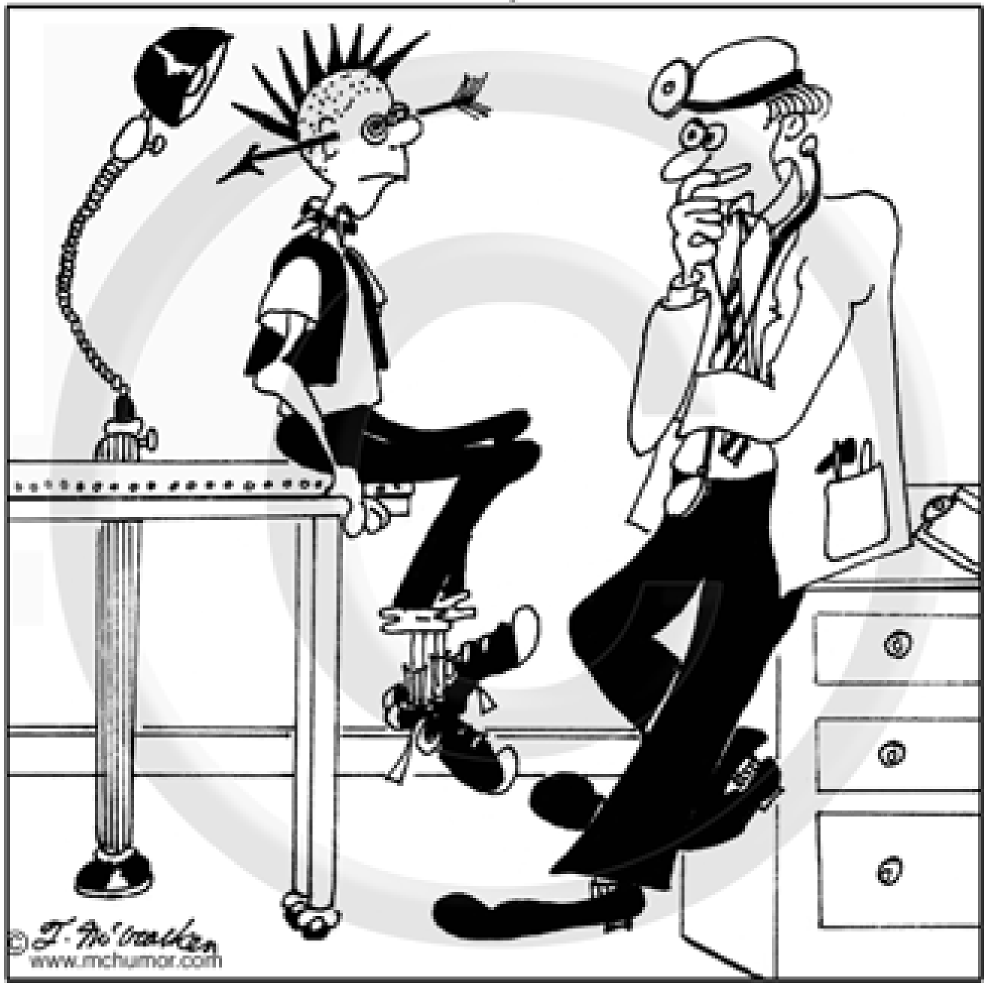






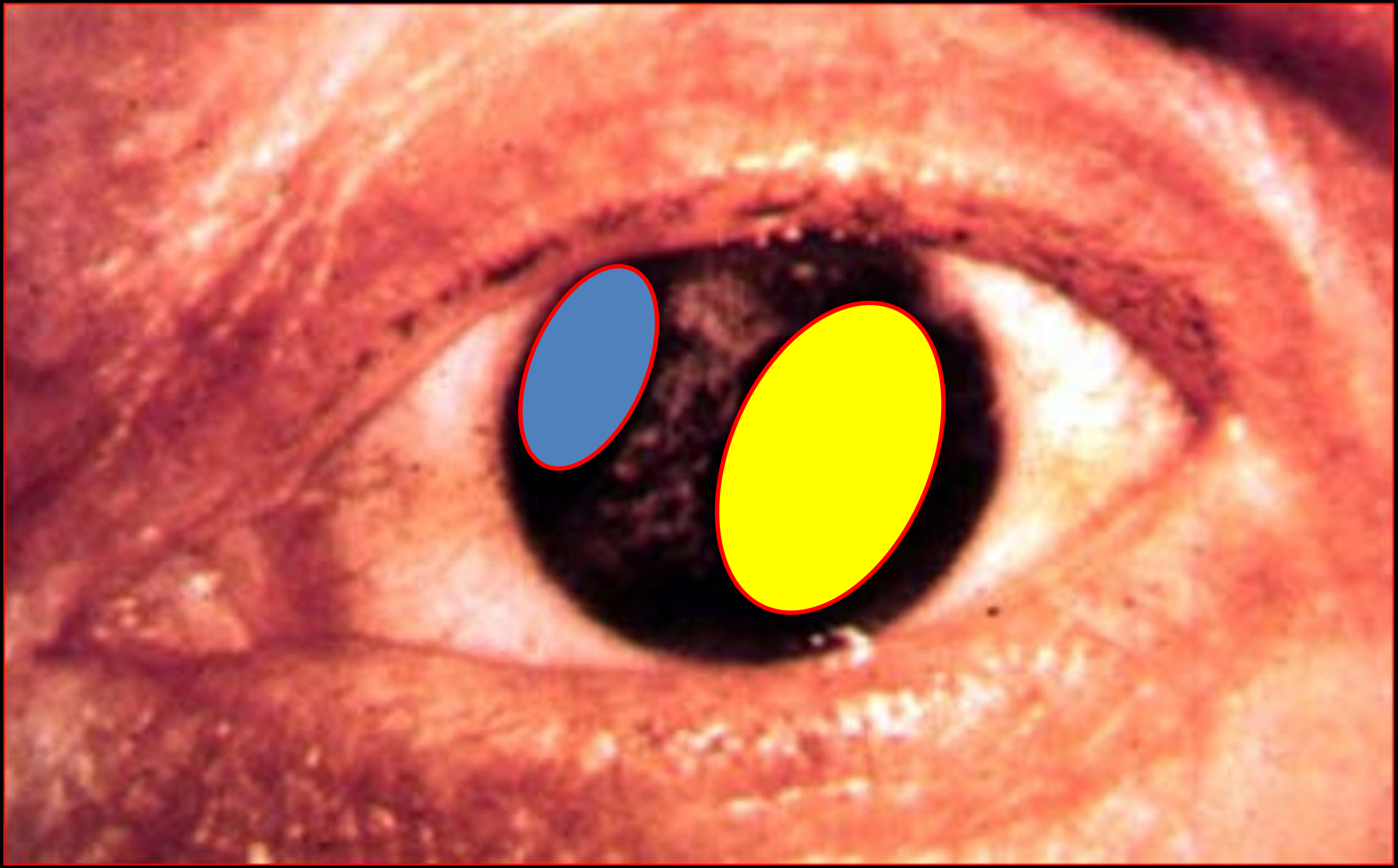


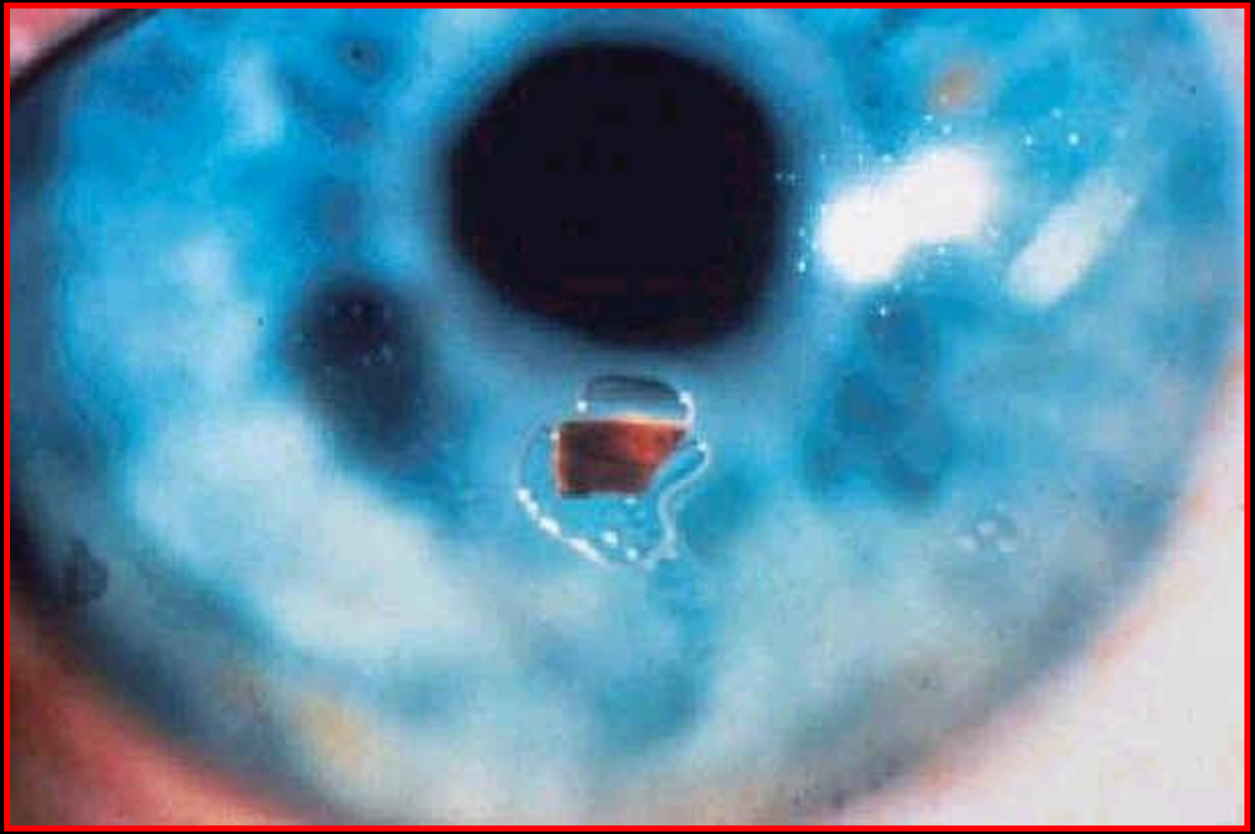
MCHUMOR.com by T. McCracken

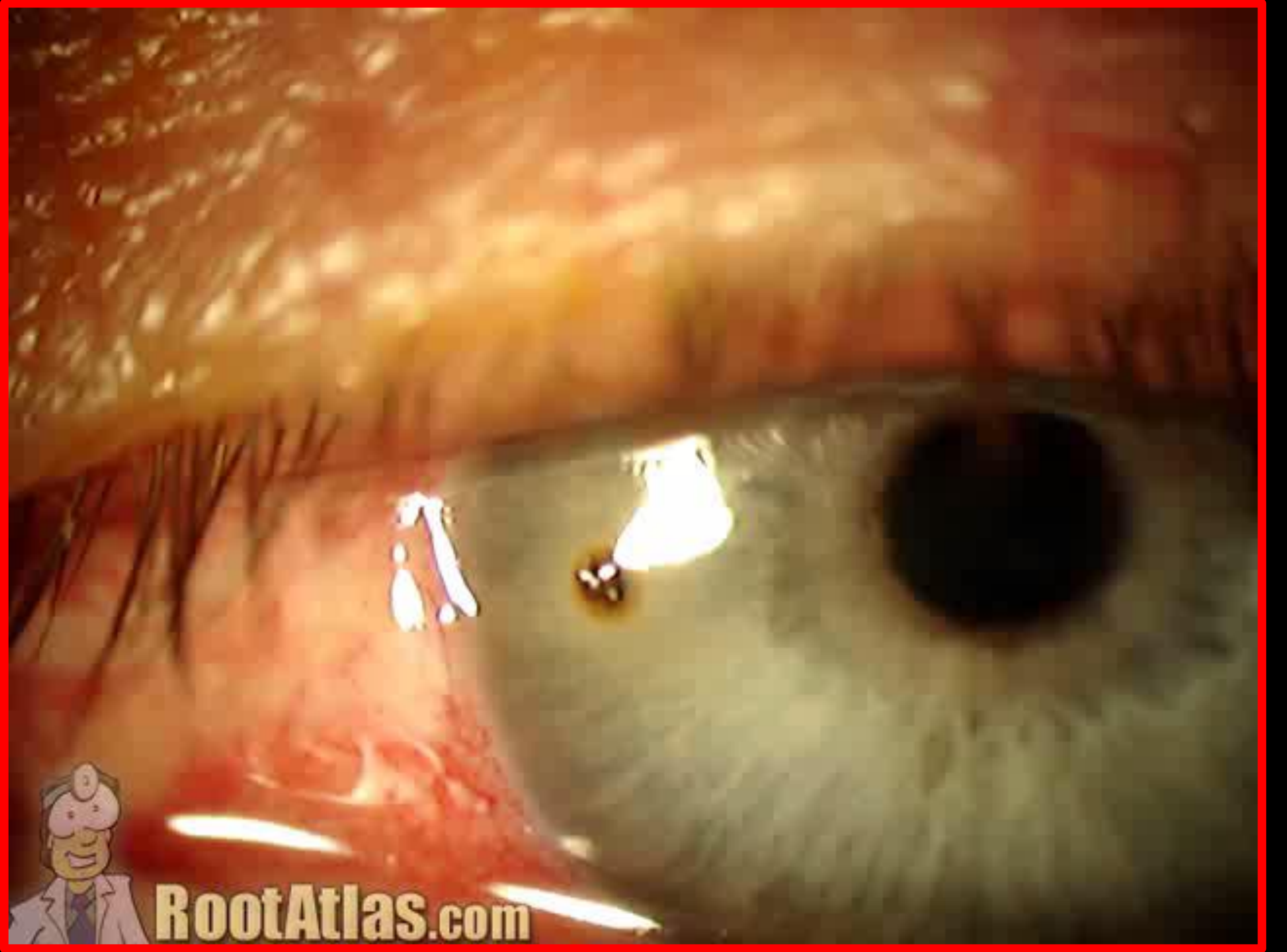


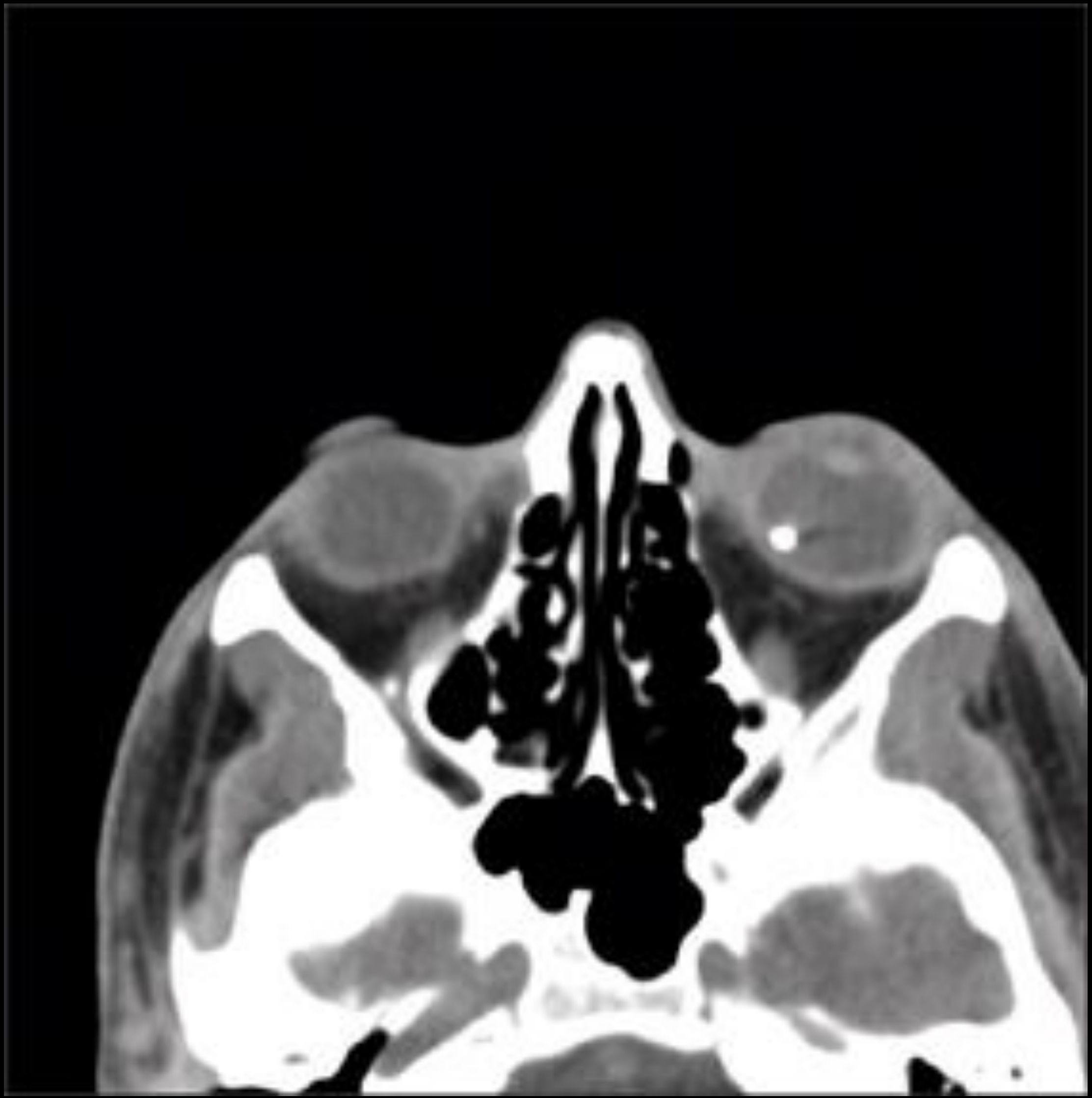
"I'd say your vision is being affected by an arrow through your head, but perhaps you'd like to get a second opinion from an eye specialist."

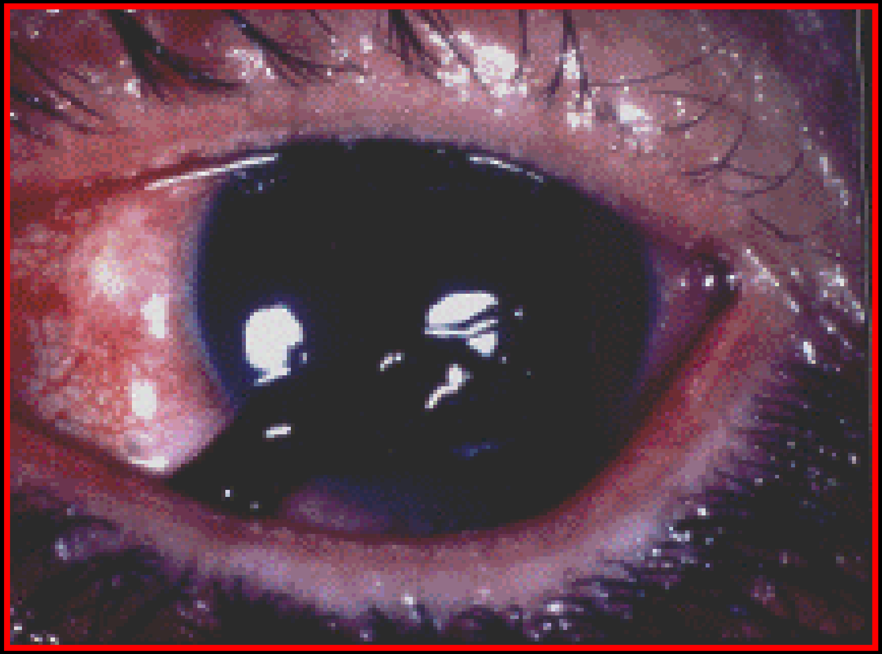
©T. McCracken mchumor.com



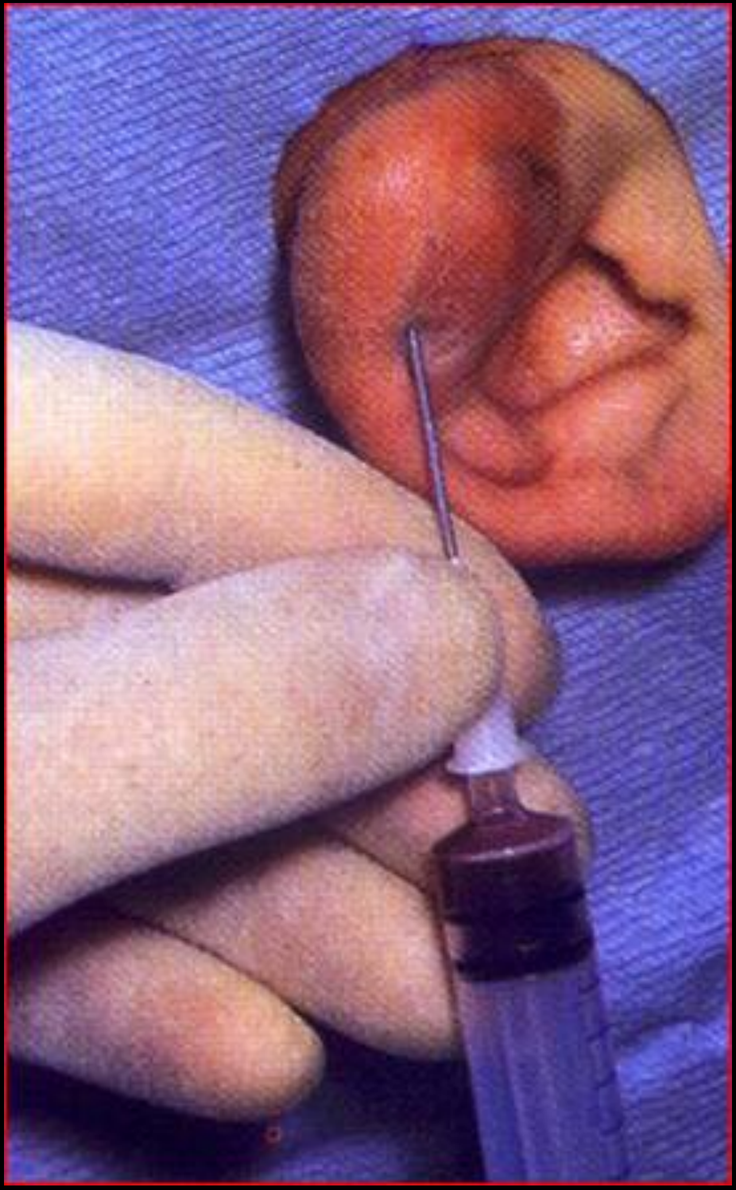



RootAtlas.com





"No, I don't think it's tinnitus."

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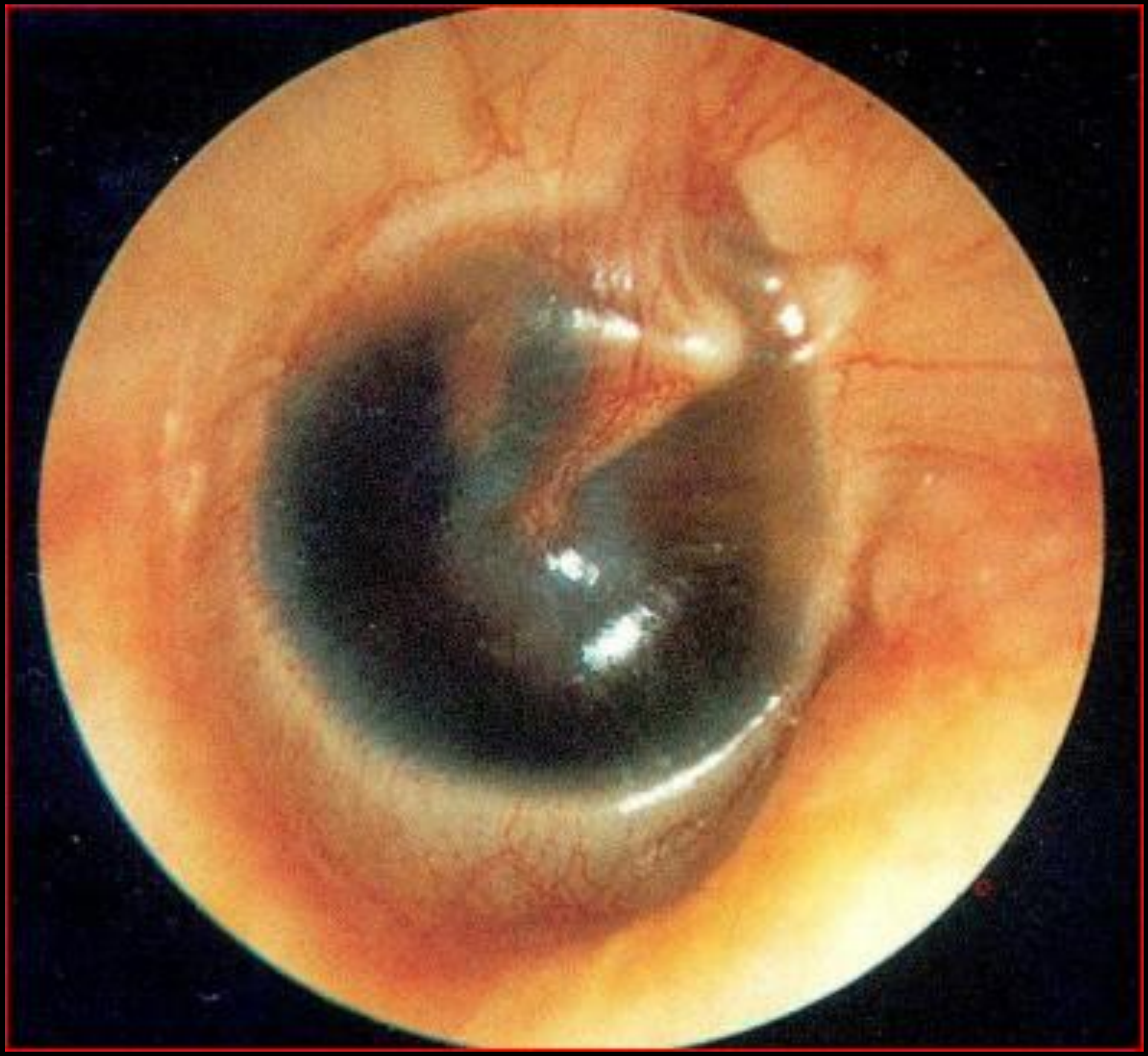


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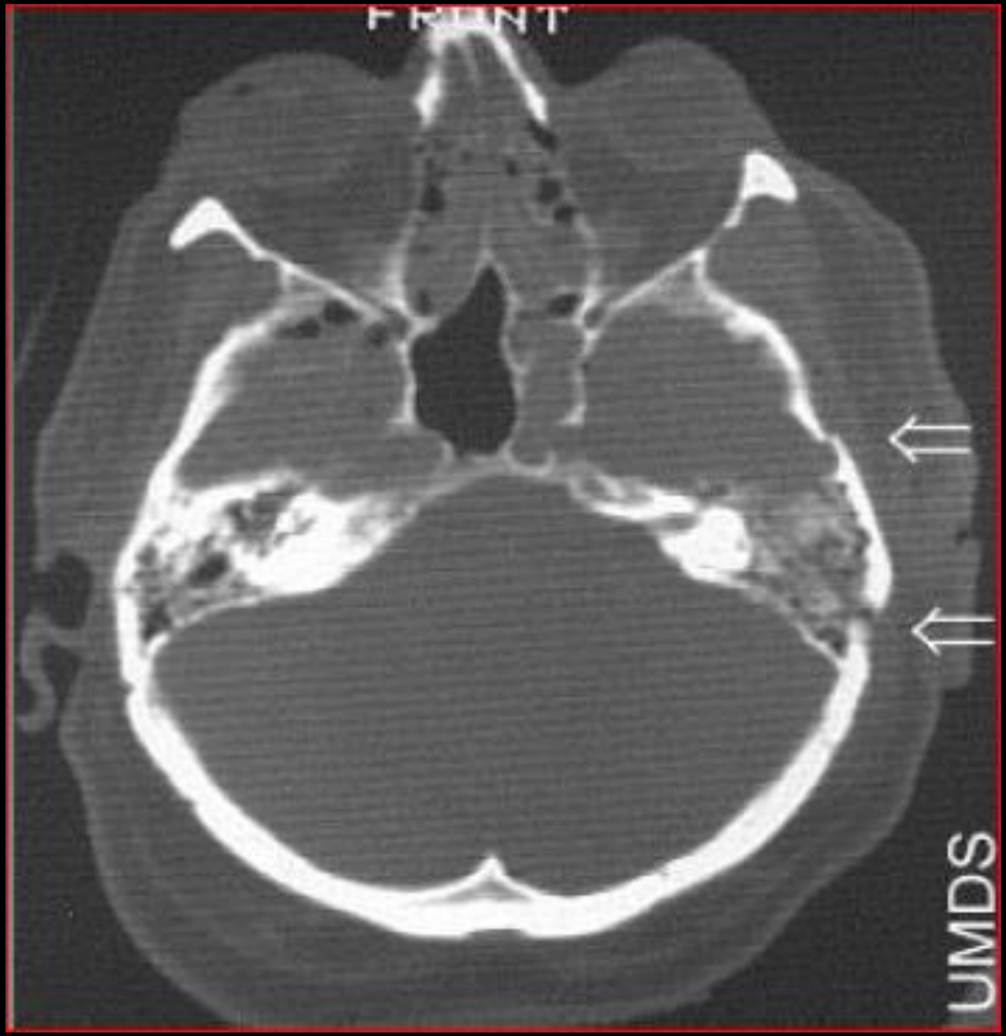
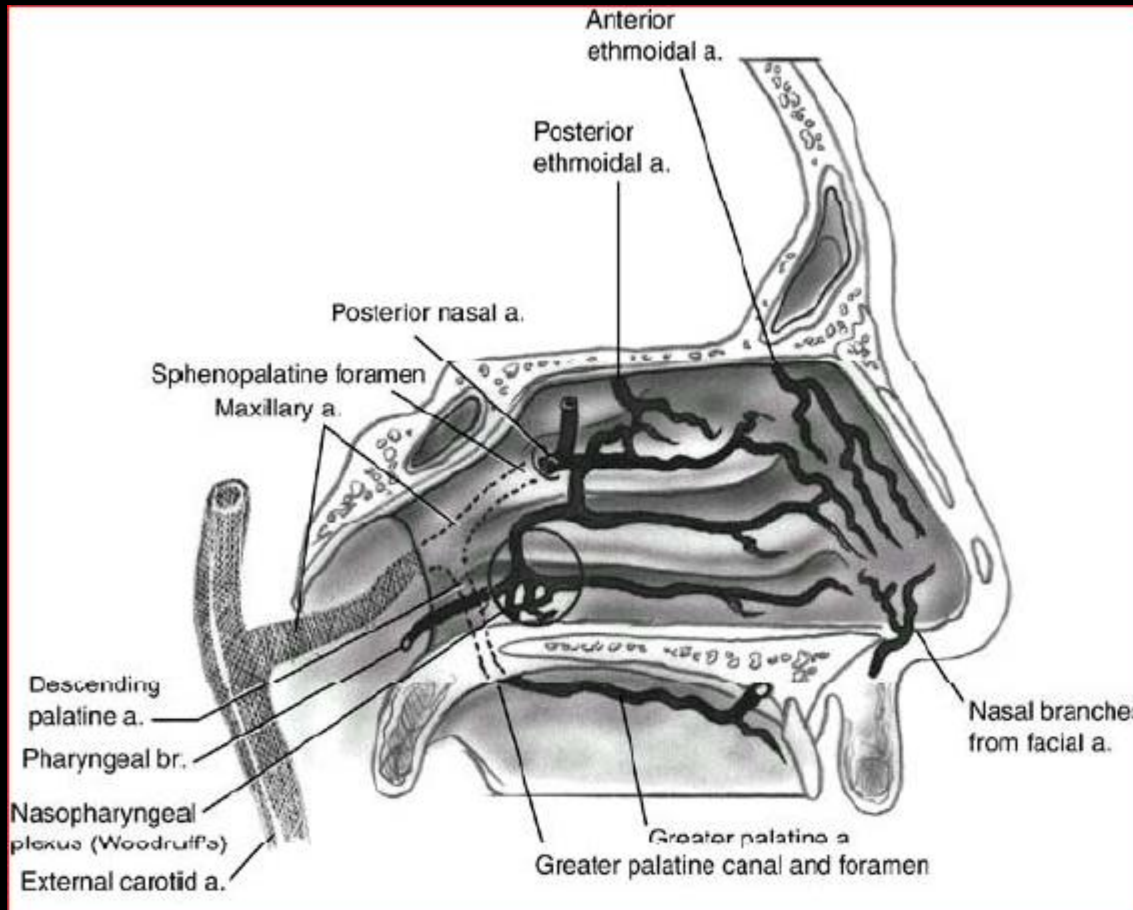
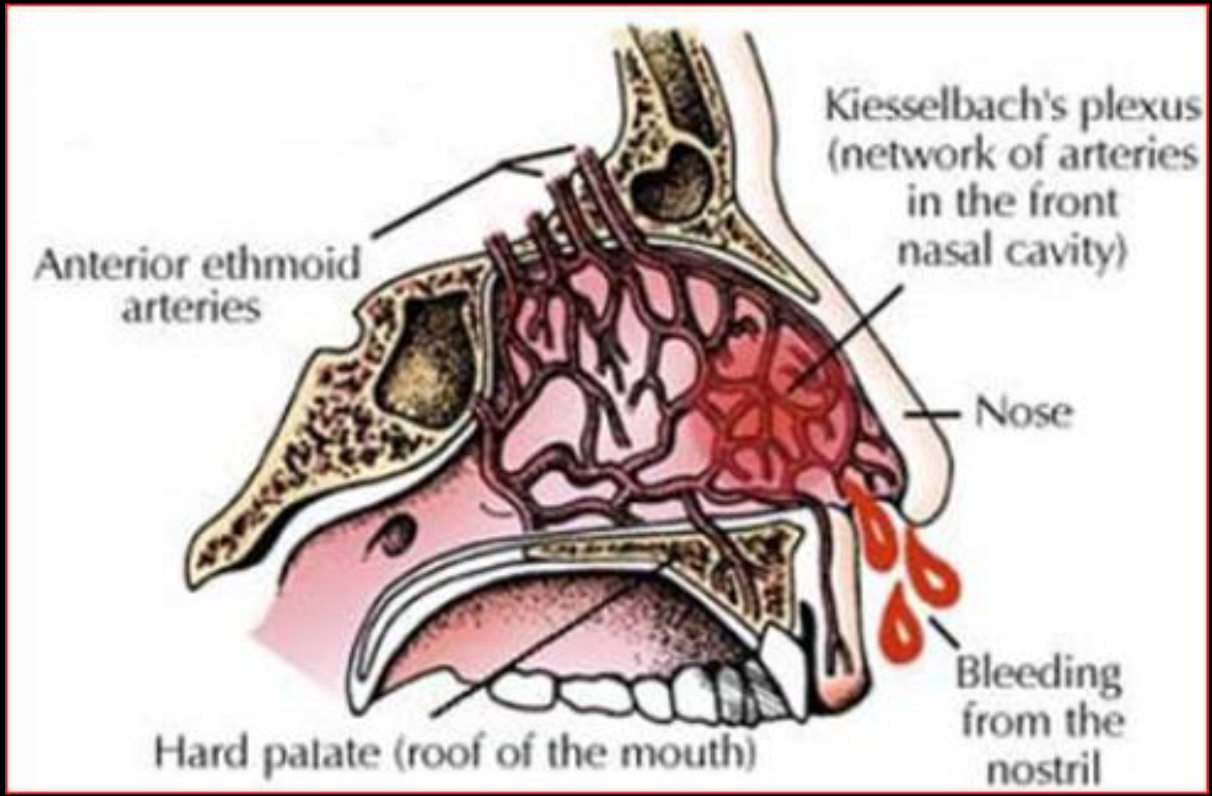
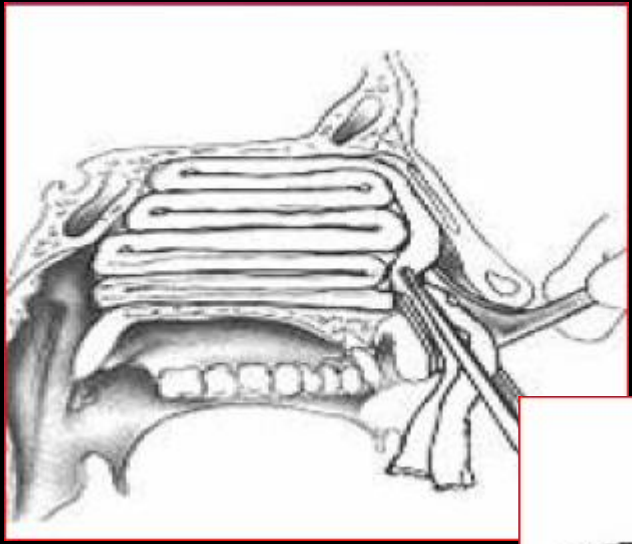
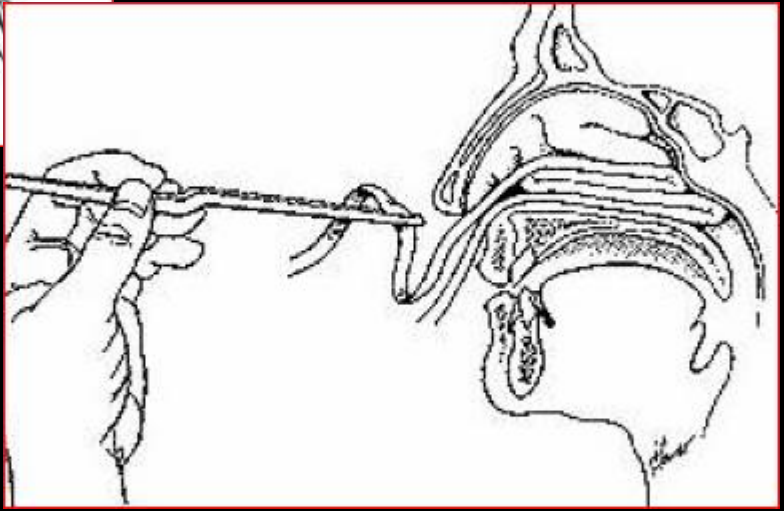


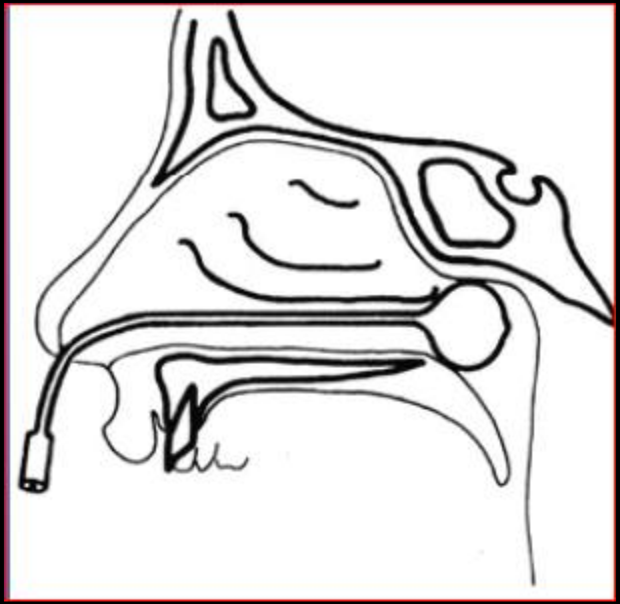
FRONT
UMDS

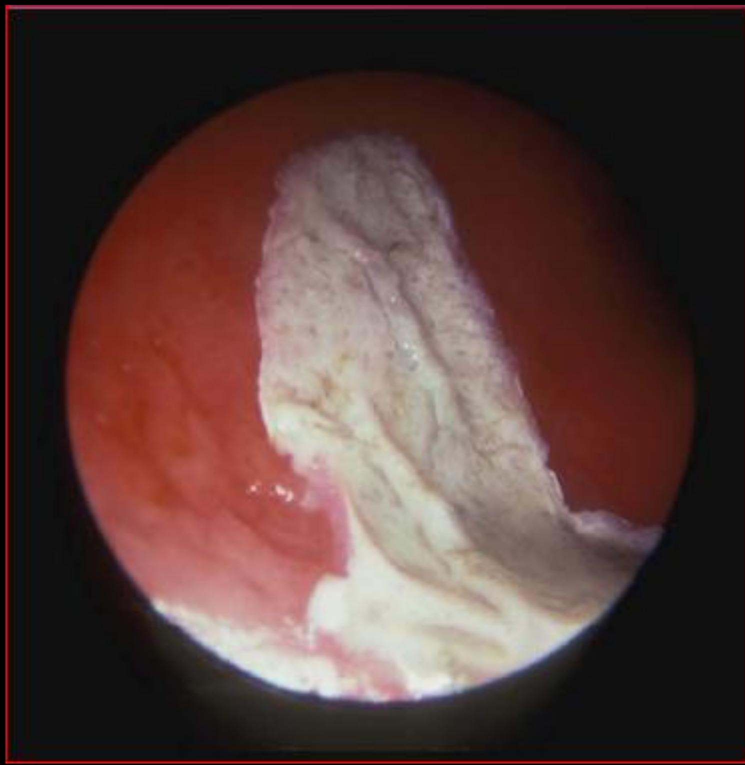

Anterior
ethmoidal a.
Posterior
ethmoidal a.
Posterior nasal a.
Sphenopalatine foramen
Maxillary a.
Descending
palatine a.
Pharyngeal br.
Nasopharyngeal
plexus (Woodruff's)
External carotid a.
Greater palatine a
Greater palatine canal and foramen
Nasal branches
from facial a.

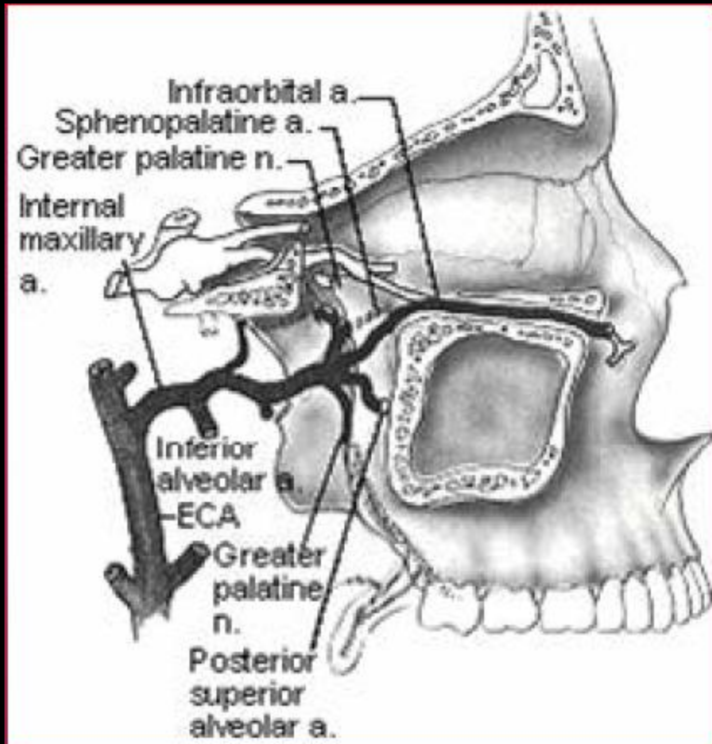

Kiesselbach's plexus
(network of arteries
in the front
nasal cavity)
Anterior ethmoid
arteries
Nose
Bleeding
from the
nostril
Hard palate (roof of the mouth)

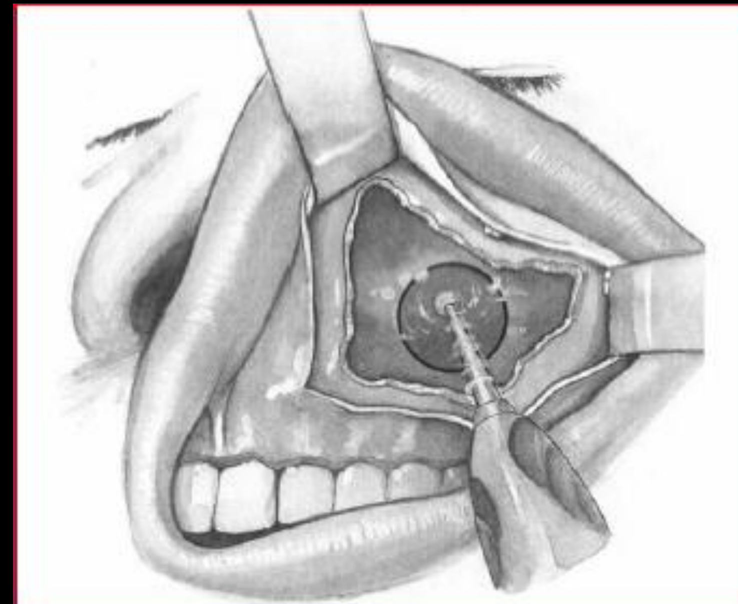



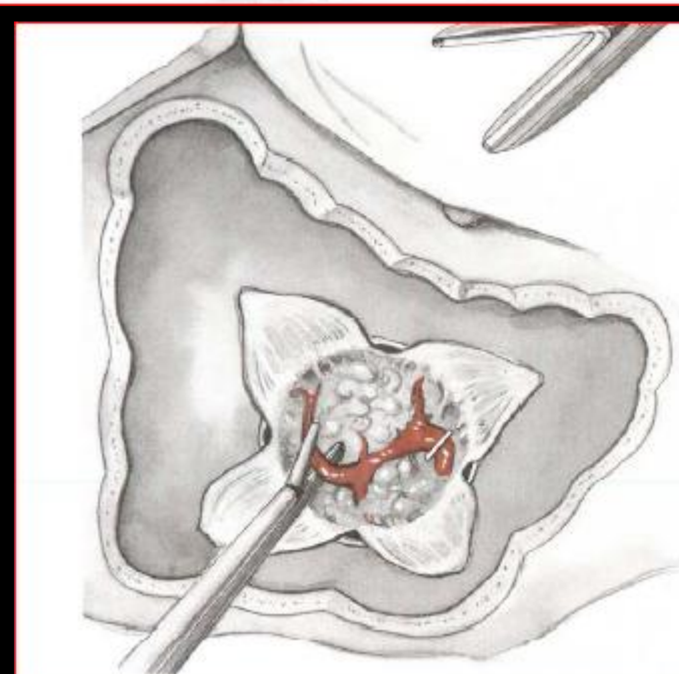


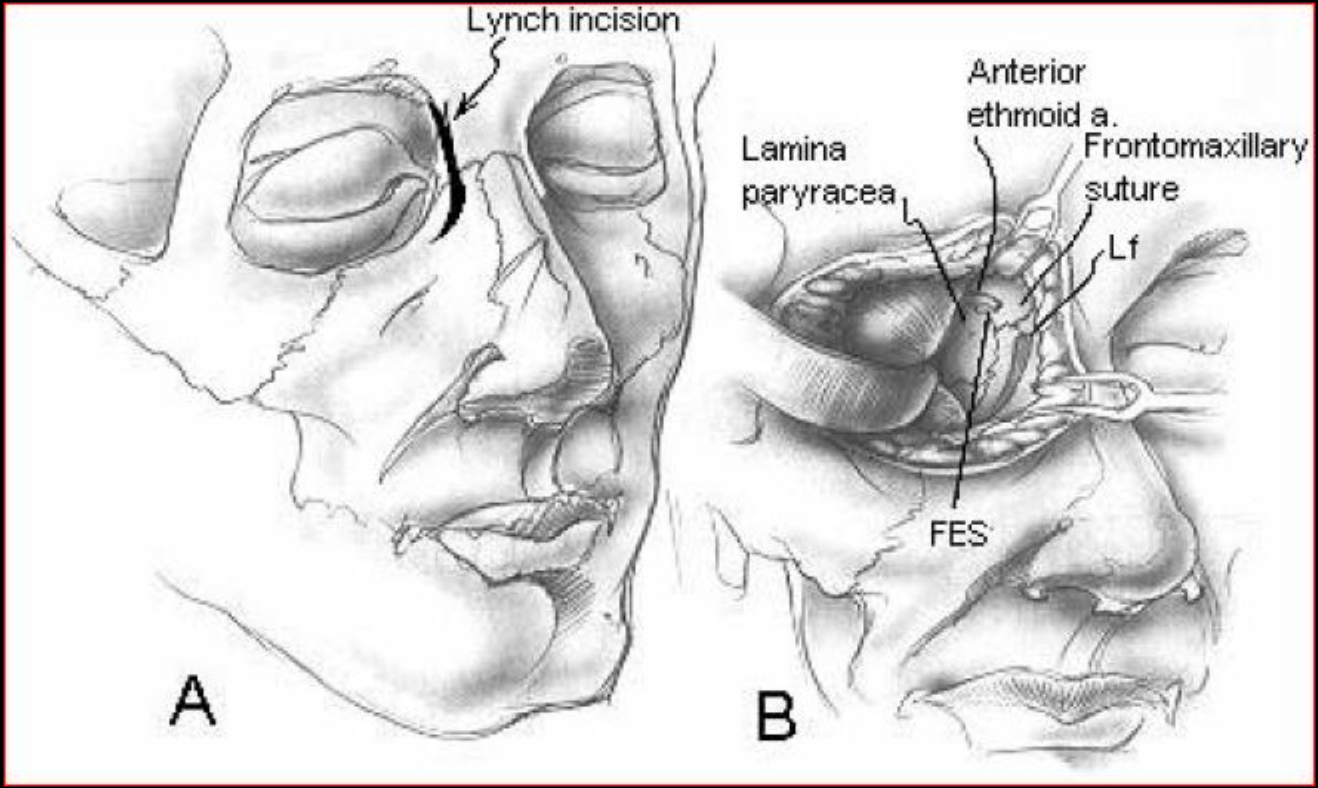




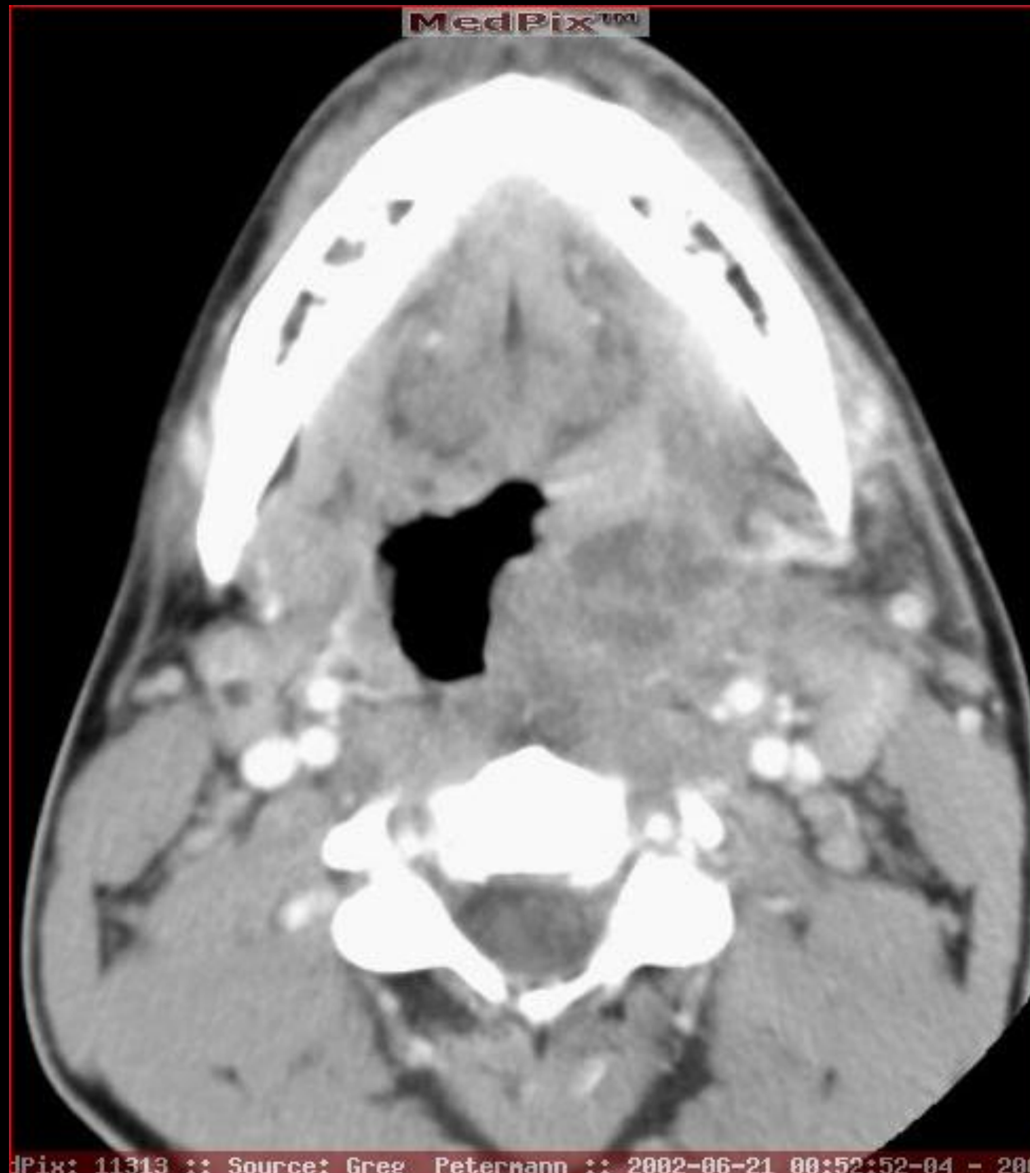

Infraorbital a.
Sphenopalatine a.
Greater palatine n.
Internal maxillary a.
Inferior alveolar a.
ECA
Greater palatine n.
Posterior superior alveolar a.







Lynch incision
Anterior
ethmoid a.
Lamina
paryracea
Frontomaxillary
suture
Lf
FES
A
B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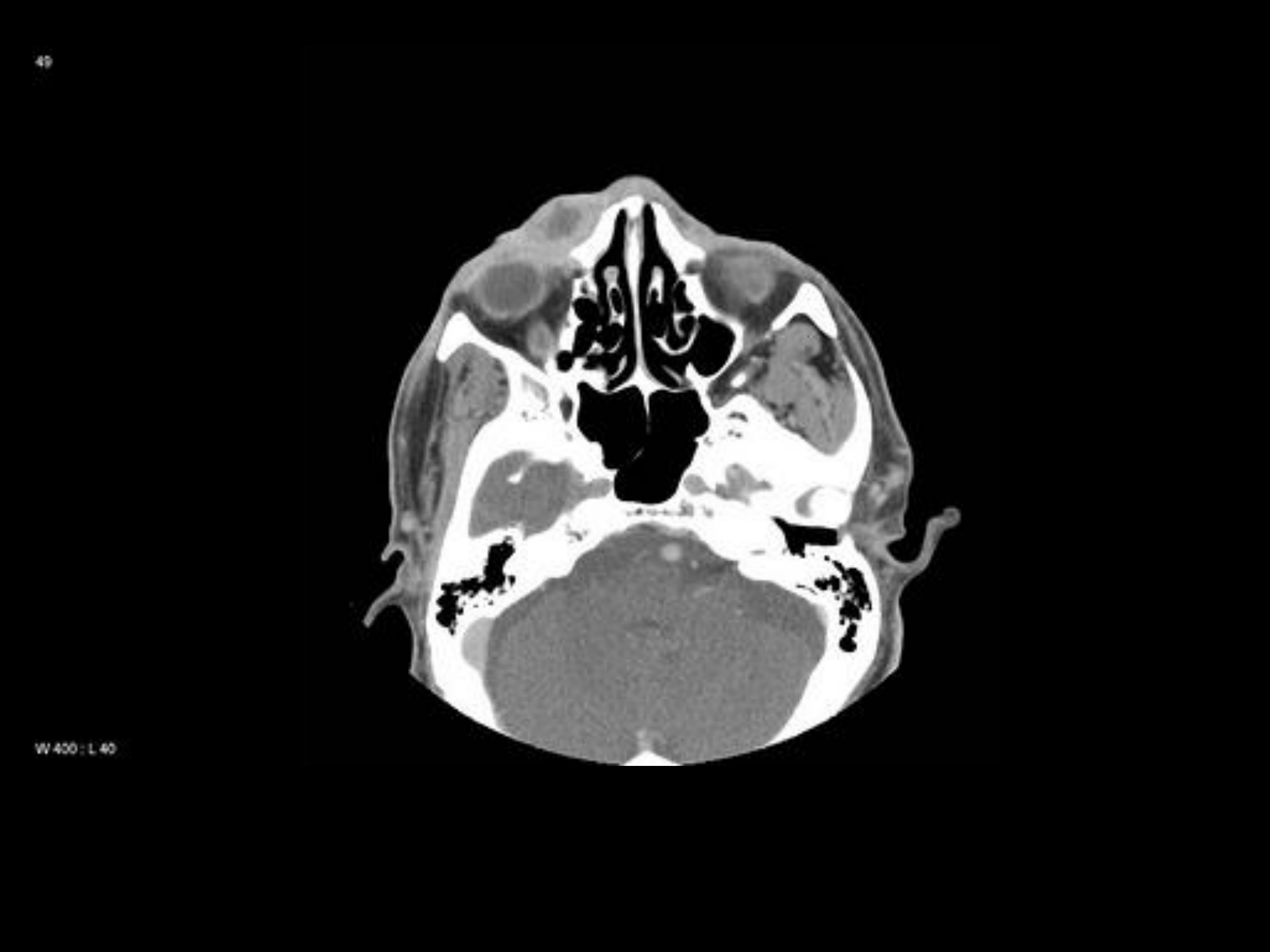
dPix: 11313 :: Source: Greg Petermann :: 2002-06-21 00:52:52-04 - 200


D



49
W 400 : L 40


MedPix™
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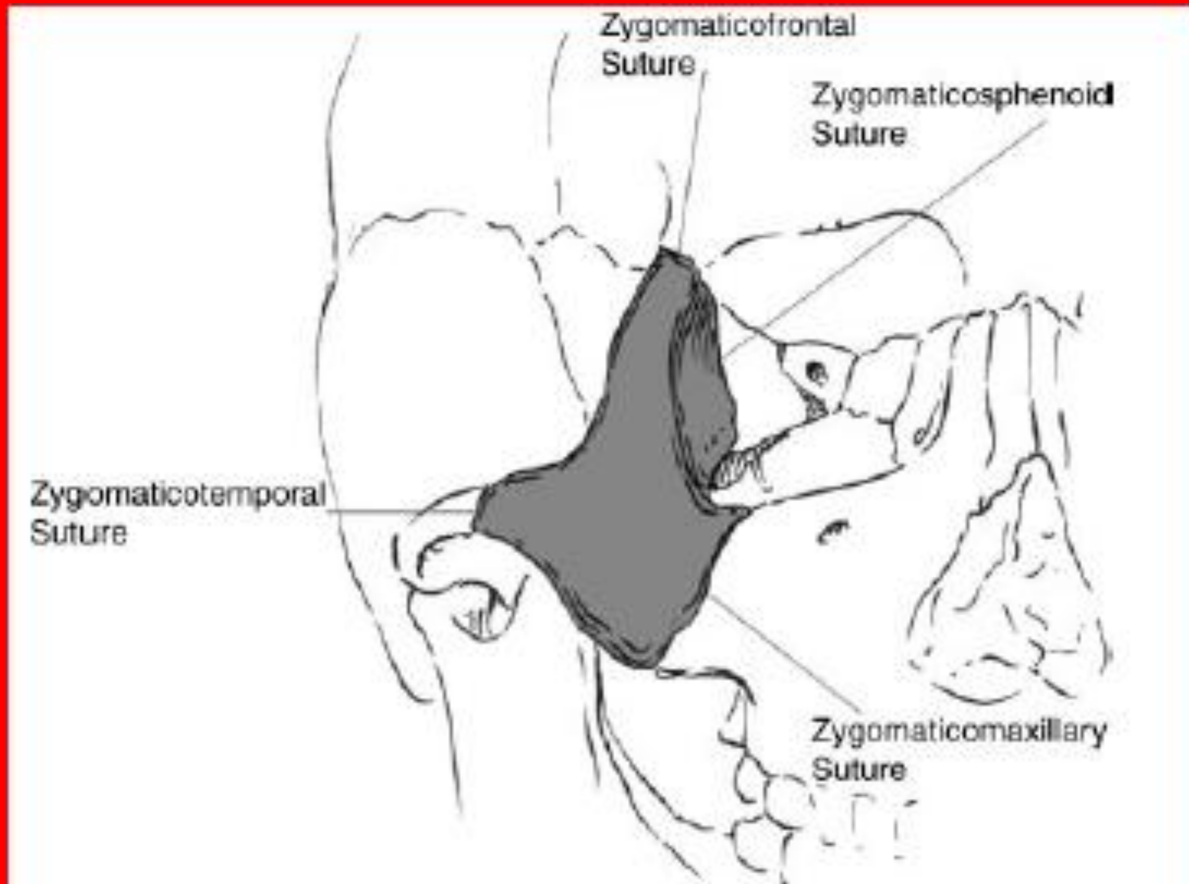
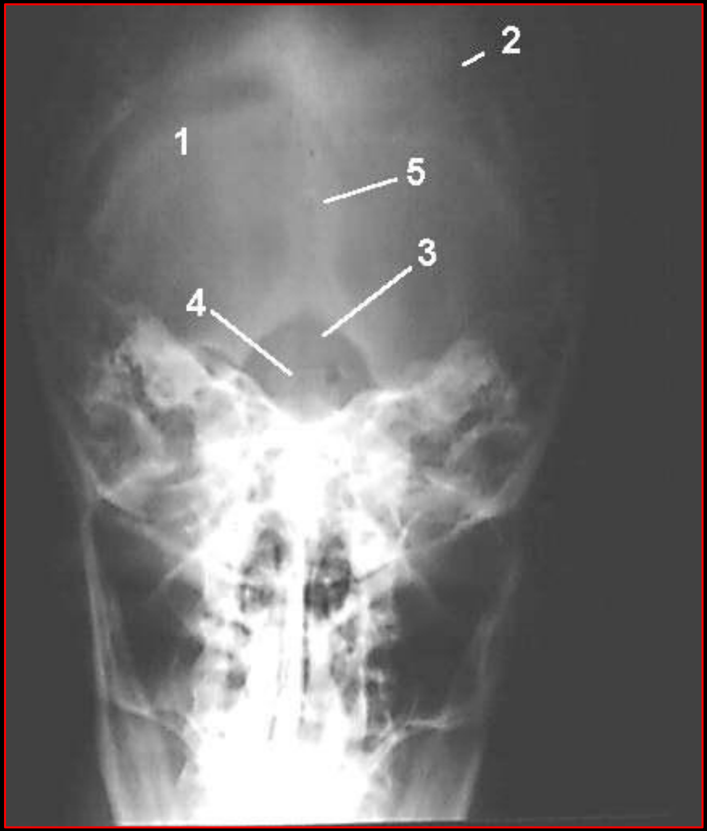
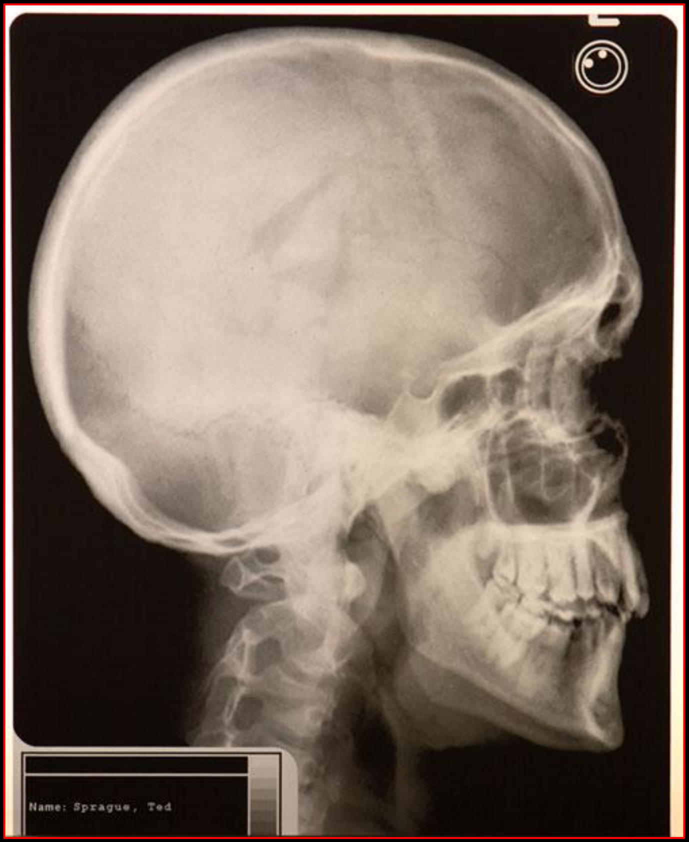
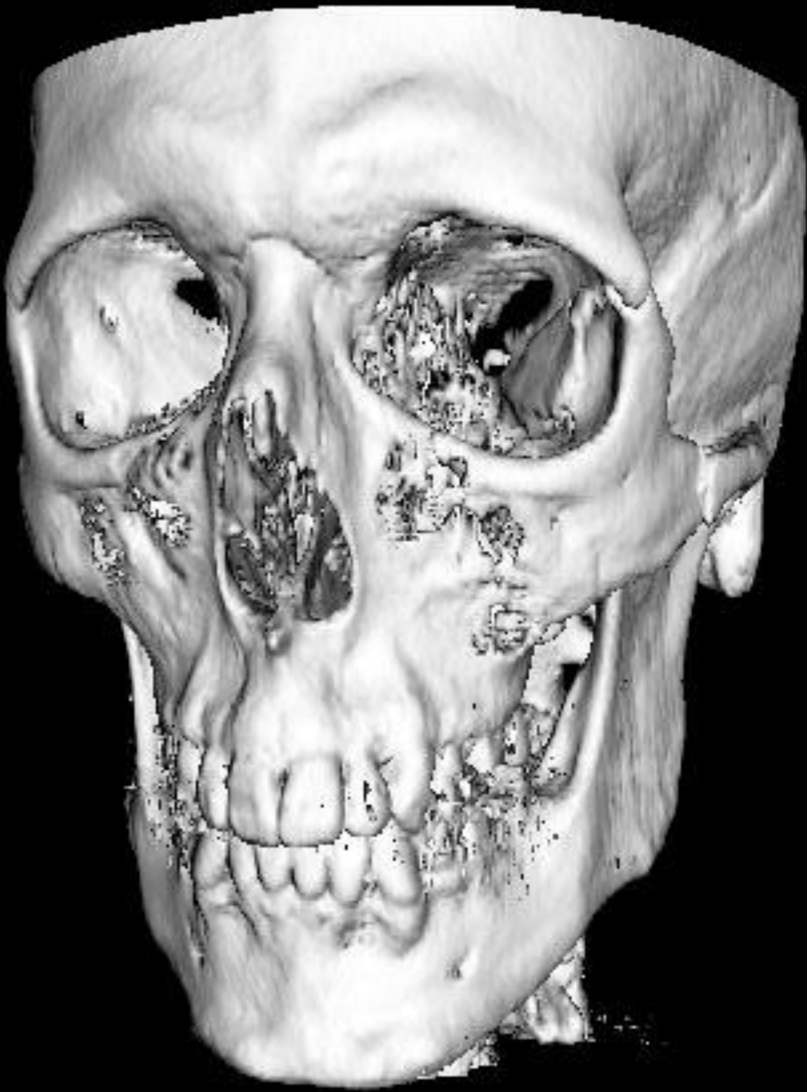

Zygomaticofrontal
Suture
Zygomaticosphenoid
Suture
Zygomaticotemporal
Suture
Zygomaticomaxillary
Suture


1
2
3
4
5

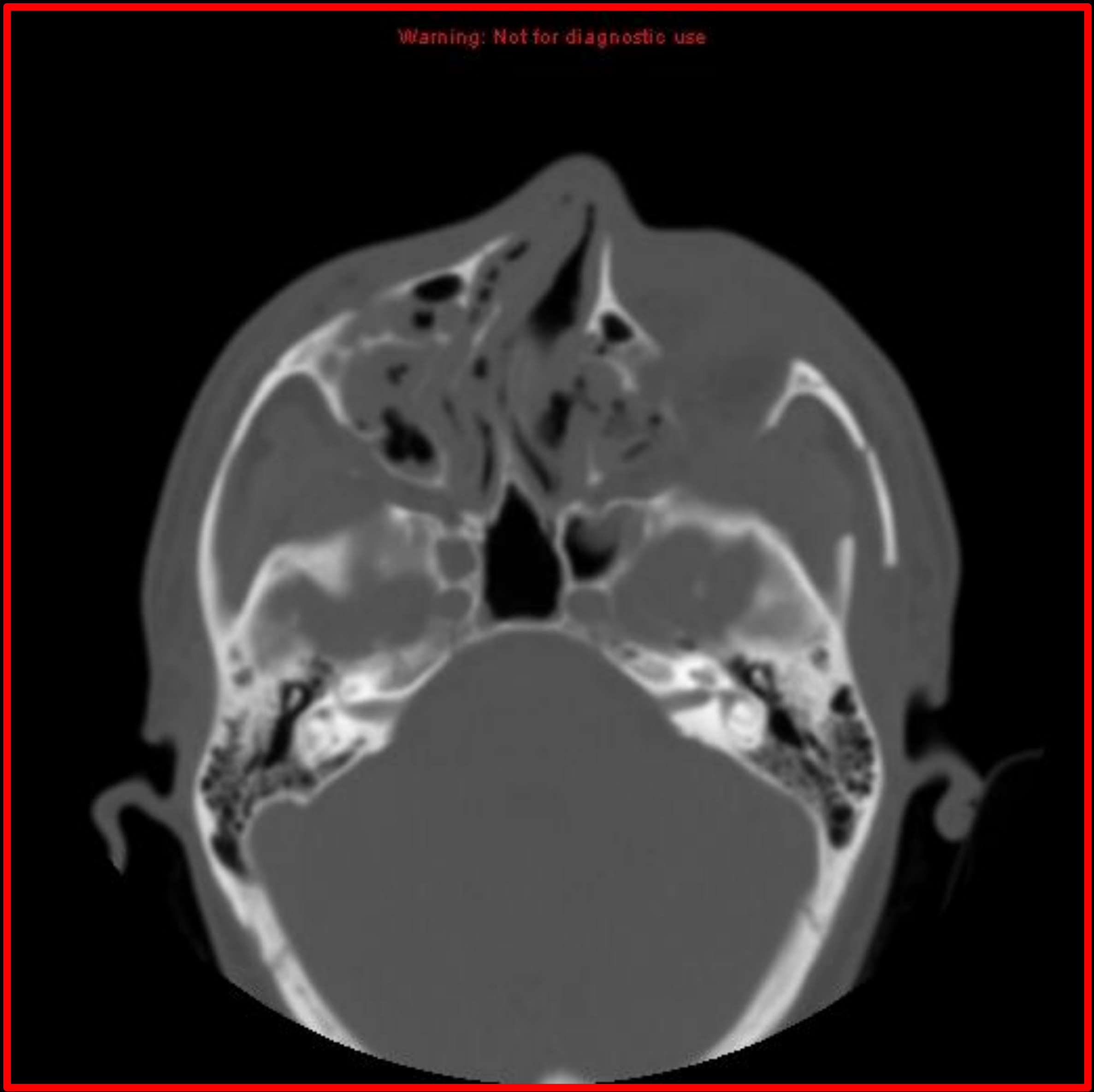

Name: Sprague, Ted


123RF

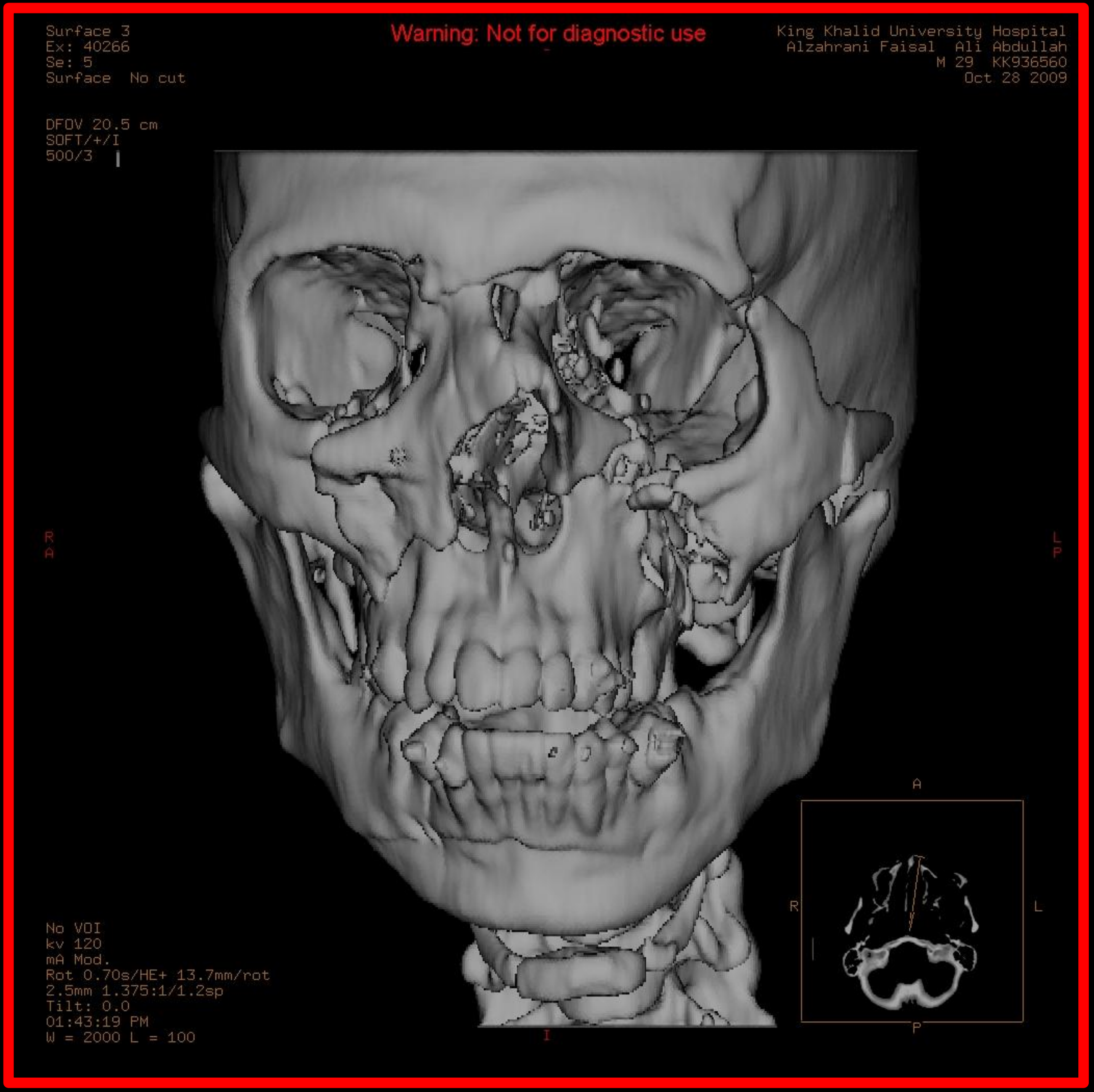


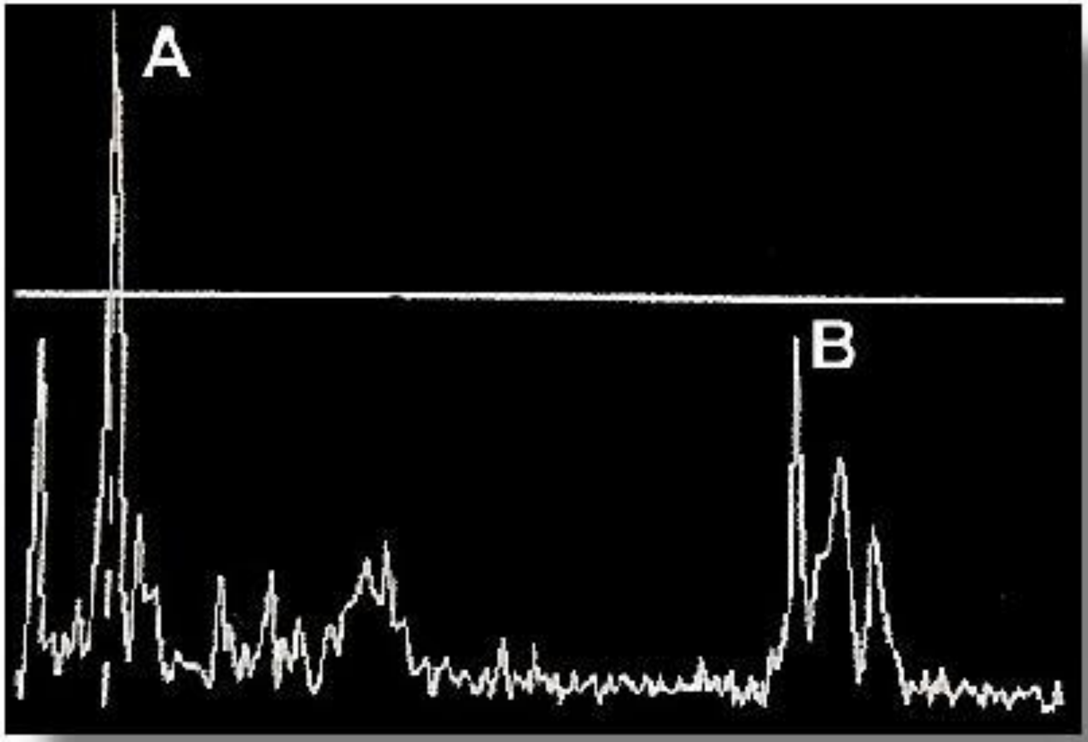

L
La

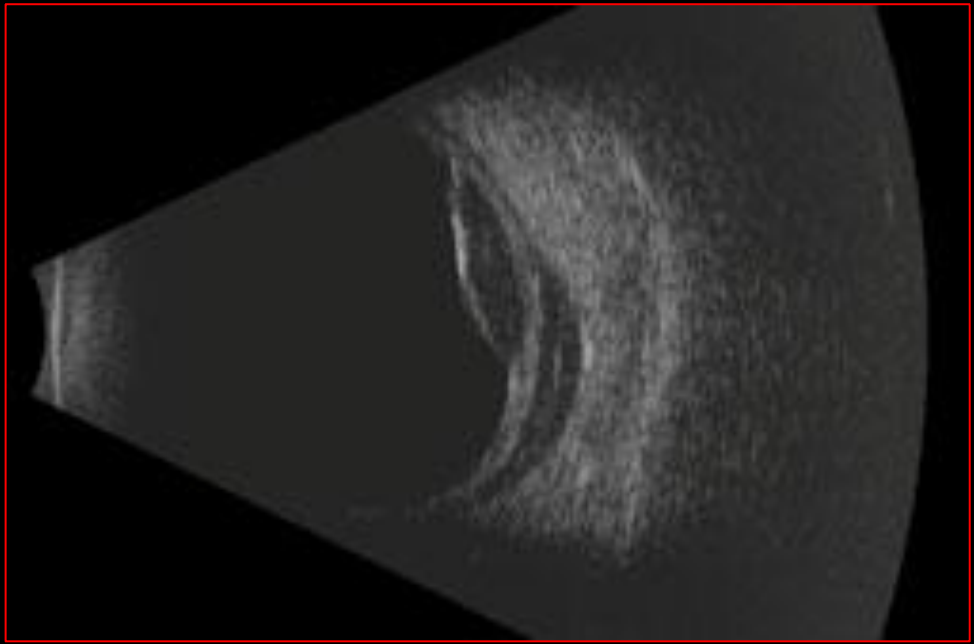
THE END

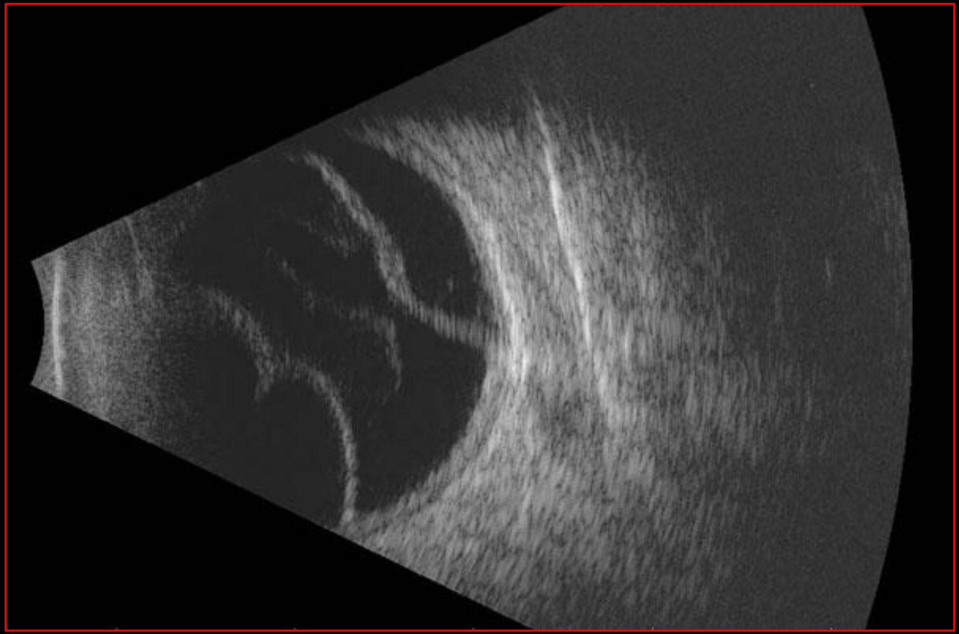

Warning: Not for diagnostic use

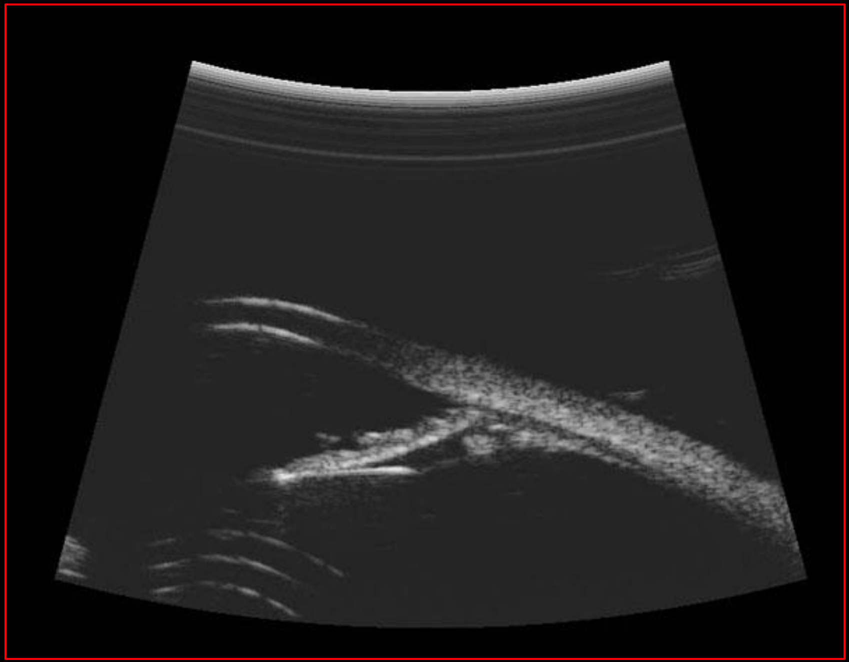

[P]


Surface 3
Ex: 40266
Se: 5
Surface No cut
Warning: Not for diagnostic use
King Khalid University Hospital
Alzahrani Faisal Ali Abdullah
M 29 KK936560
Oct 28 2009
DFOV 20.5 cm
SOFT/+/I
500/3
R
A
L
P
A
R
L
P
No VOI
kv 120
mA Mod.
Rot 0.70s/HE+ 13.7mm/rot
2.5mm 1.375:1/1.2sp
Tilt: 0.0
01:43:19 PM
W = 2000 L = 100
I


A
B








Mag: 1.0X
60 Deg
10 MHz

Pathophysiology and diagnostic workup of optic nerve avulsion

Tawfiq A. Almezeiny, MD.

Optic nerve injuries may include infarction, transaction, or avulsion. Compression by perineural hemorrhage or fracture of the optic canal may also occur. Any sites along the anatomic course may be injured, including the intraocular, intracanalicular, or rarely the intracranial chiasmal segment. Optic

edematous optic nerve into its sheath posterior to the lamina cribrosa, total retinal detachment, and vitreous hemorrhage. The results suggested a diagnosis of acute traumatic optic nerve avulsion (**Figure 1**). Therefore, he was admitted urgently for surgical decompression of the orbital canal, and open reduction and fixation of the complex facial fractures. No immediate postoperative complications developed. However, postoperatively, neither visual acuity nor the extraocular movements improved during the first week. Unfortunately, at one-month follow-up, he had no light perception.