Painless Vision Loss

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Overview

• general principles
• specific diseases
• cases
• summary

Pain

• sharp = surface problem
• dull = IOP or sinus
• sharp pain + tearing = corneal scratch
• vision loss without pain = posterior segment
Painless Vision Loss

- gradual and generalized = cataract
- sudden = posterior segment (vitreoretinal or optic nerve)

Posterior Segment

- vitreous
- retina
- macula
- optic nerve

Macula

- fovea
- subserves 20/20
Macular Scar

• vision?

Central Scotoma

sudden painless vision loss

• Wet Macular Degeneration
• Vitreous hemorrhage
• Retinal Detachment
• Retina Vascular Occlusion
• Ischemic Optic Neuropathy
• Central Serous Retinopathy
• Optic Neuritis
• Maculopathy
• Toxoplasmosis
Macular Degeneration (age related)

- 50 and above
- dry: gradual
- wet: sudden vision change

CASE

- 70y WF with sudden onset centrally distorted and blurred vision
- no eye pain

Wet Macular Degeneration

- sudden vision loss
- sudden distortion
Metamorphopsia

Amsler Grid Chart Comparison

Normal Vision  AMD Vision

central scotoma

Wet Macular Degeneration

- abnormal blood vessel
- destroy delicate photoreceptor layer
Treatment for wAMD

- antiVEGF injections
- q4-12w

AntiVEGF

- VEGF: vascular endothelial growth factor.
  - aflibercept = Eylea
  - ranibizumab = Lucentis
  - bevacizumab = Avastin

CASE 1

- 44y AODM x 20y
- floaters that turned into general haze
- no pain
Vitreous Hemorrhage

- often floaters initially
- fluctuating vision
- diabetics
- + flashes think retinal tear?

Treatment for VH

- spontaneously clear or...
- operate

CASE 2

- 24y myope sudden onset flashes then floaters.
- 1 day later superior curtain progressing toward central vision over days
- no pain
Retina Detachment

- F/F
- enlarging curtain
- macula on or off?
Treatment for RD

- scleral buckle
- vitrectomy
CASE 3

- 62y HTN and AODM
- sudden onset vision loss involving half of visual field
- no pain

Retinal Vascular Disease

- Retina Vein Occlusion
- Retinal Artery Occlusion

CRVO

- DM, HTN
- variable outcome
BRVO

- sectoral vision loss
- HTN, DM, chol, age, and vascular anatomy

Treatment for RVO

- antiVEGF injections
- steroid injections
- laser

antiVEGF injections

6/2013 - Before Avastin
7/2013 - After 1 Avastin
1/2014 - After 5 Avastin
11/2014 - No Avastin since 1/2014
AntiVEGF

- VEGF: vascular endothelial growth factor.
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Steroid for RVO

- dexamethasone
- triamcinolone

CASE 4

- 70y WF with sudden onset blurred vision
- also HA/F/NS/temporal tenderness
- jaw claudication and scalp tenderness
- no eye pain
Ischemic Optic Neuropathy

- AION
- arteritic due to Temporal arteritis?
- constitutional symptoms?
- half VF loss

Central Retinal Artery Occlusion

- 90 minutes
- eye massage
- temporal arteritis

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CASE 5

- 32 yMCTL wearer
- irritated eye x 3 days
- progressed to redness
- very painful eye.

Summary

- eye pain and redness = surface problem
- painless vision loss = posterior segment problem
- same or next day referral
- trauma...metallic ricochet? refer