A Practical Approach to the Patient with Double Vision

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Diplopia Test
Objectives

• List important historical clues in the differential diagnosis of diplopia.
• Identify “fellow travelers” of diplopia
• Outline an approach to the patient with diplopia.
Historical Points

- Monocular vs. Binocular
- Acute vs. Chronic (>3 mos)
- Isolated vision problem?
Monocular Diplopia

- astigmatism
- media opacity
- subluxed lens
- dislocated IOL
- macular pathology
Monocular Diplopia

- pinhole
- refraction
- slit lamp
- corneal topography
- macular biomicroscopy
Monocular Diplopia

neuroophthalmology
Historical Points

• Monocular vs. Binocular

• Acute vs. Chronic (>3 mos)

• Isolated vision problem?
Historical Points

Pattern of Diplopia

- Horizontal or not?
- Comitant (same in every direction)?
- Relieving/exacerbating factors
  
  time of day, near vs. far
Examination

Fellow Travelers

- pupils
- eyelids
- orbital signs
- trigeminal / facial nerve function
- head position
Examination

Fellow Travelers

- pupils
- **eyelids**
- orbital signs
- 5\(^{th}\) / 7th nerve function
- head position
Orbital Signs

- proptosis
- chemosis
- conjunctival injection
Look down across corneas
Examination

Fellow Travelers

- eyelids
- pupils
- orbital signs
- trigeminal / facial nerve function
- head position
Cross Section Through the Pons
Orbicularis Weakness
Examination

Fellow Travelers

• eyelids
• pupils
• orbital signs
• trigeminal / facial nerve function
• head position
Examination

Ocular Motility

• Ductions & Versions

• Alignment
Sometimes fairly obvious
Sometimes less obvious
Examination

Ocular Motility

- Ductions & Versions
- Alignment – Crucial if not obvious!
  - cover/uncover
  - cross cover
Pattern of Misalignment is Paramount to Appropriate Diagnosis.
upgaze
Left head tilt
Right head tilt
On to the Cases!
Most isolated acute 6th n palsies are microvascular!
2. Cogan’s Lid Twitch – Myasthenia Gravis
Fatiguable Right Upper Lid Ptosis
Myasthenia Gravis

Eyelid Signs

Ptosis - variable, attempt to fatigue

Cogan’s lid twitch - lid rapidly settles into a lower position after upward saccade

Orbicularis weakness - if severe lagophthalmos results
Myasthenia Gravis

Testing

Sleep/Rest Test

Patient closes eyes for 30 minutes
Ptosis measured before and after

Will less than 30 minutes suffice?
Myasthenia Gravis

Before rest

After 30 minutes of rest
Myasthenia Gravis

Testing

Ice Test

2 minute ice application to ptotic lid

>1 mm improvement sensitive, specific
2 Minute Ice Test
Summary

1. Monoc vs Binoc

2. Check Fellow Travelers!

3. Determine the Pattern.