Visual Field Pearls

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Disclosure:
The speaker has no financial interest in the subject matter of this presentation.
Objective:

• To convey a useful strategy for the localization of optic nerve, chiasmal and retro-chiasmal vision loss, based on data obtained from formal visual field analysis (both manual and computerized).
Visual Field Defects: General Principles

- Do the right test!
  - Confrontation
  - Amsler
  - Static (computerized) perimetry
  - Kinetic (Goldmann) perimetry

- Localize:
  - Optic nerve
  - Chiasm
  - Retro-chiasmal

- Look for CONGRUITY
  - IN GENERAL more congruous = posterior
Optic Neuropathy

- arcuate
- Ceco-central
- altitudinal
- central
31 year-old woman:

CC: “There’s a shade over half my right eye.”

HPI: Sudden onset temporal field loss OD
Severe vertex headache

Neuro-Ophthalmic Examination:
VA 20/30 OD, 20/20 OS
No disc edema
Temporal field loss OS to confrontation
APD OD
Goldmann Fields

OD

OS
Chiasm/Sella Relationship

Prefixed (15%)

Normal (80%)

Postfixed (5%)
Localization Tips:

31-year-old woman with temporal vision loss OD

- Insidious progression (unaware of defect OS)
- Minimal decrease in VA
- NO optic disc edema
- ASYMMETRIC bi-temporal defect
Case Revisited...

- 31-year-old woman, sudden onset of temporal field loss OD with severe vertex headache
- VA 20/30 OD, 20/20 OS; no disc edema
- Temporal hemianopia OD to confrontation
- APD OD
Goldmann Fields

OD

OS
Glisson CC, Vallam KK, Eggenberger ER (2006)