Ocular Complications of PEG-Interferon

ETAC Team
PEG-IFN Associated Retinopathy

• First described in 1990
• Incidence 18-86%, only 0.4% symptomatic in a large study.
• Unknown mechanism
• Ribavirin has synergistic effects
• Pretreatment eye exam did not predict risk of retinopathy
PEG-IFN Associated Retinopathy: Classic Presentations

- Most asymptomatic and reversible
- Cotton wool spots and superficial hemorrhages
- Occur in the first 16 weeks, most resolved within 8 weeks after treatment completion
Cotton Wool Spots
(Metha-Uma 2010)
PEG-IFN Associated Retinopathy: Atypical Presentations

- Retinal artery occlusions/mixed vascular occlusions
- Retinal detachments
- Optic disc edema
- Panophthalmitis
- Granulomatous uveitis
Mixed Vascular Occlusion
(Bajaire 2011)
Ophthalmologic Evaluation
(HCV Guideline. HRSA 2010)

• Baseline evaluation recommended inpatients with underlying ophthalmologic conditions/risks
• Interval and frequency of evaluation based on underlying ophthalmologic conditions
• Patients on PEG-IFN with new visual symptoms should have prompt ophthalmologic evaluation
PanOptic Ophthalmoscope

- Easy to enter small, undilated pupils
- Provides a 5X larger view of the fundus
- Increases magnification by 26% over a standard scope
- Greater working distance between practitioner and patient
Management of PEG-IFN Associated Retinopathy

- Regular monitoring with ophthalmologic exam
- No PEG-IFN dose reduction required in most cases
Selected References


