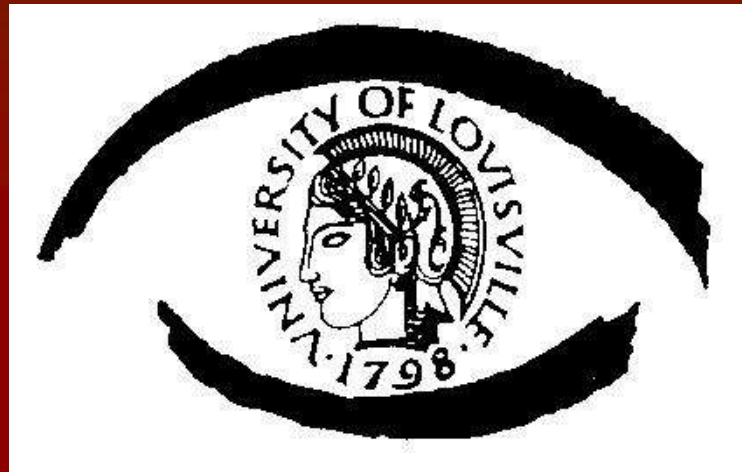


Retina Conference



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Department of Ophthalmology and Visual Sciences

10/01/10

Subjective

CC: 23 year old white female presents with decreased vision x 1 week OU.

HPI: Complaining of shadows OU in central vision, appears to have worsened over the last week. No associated redness, pain, or photophobia.

POH: No prior events of visual loss. No family hx of ocular disease.

Subjective

PMH: Mitral valve prolapse

No hx of prodromal illness or recent fever

No exposure to animals, traveling, or drugs

No arthritis, occasionally arthralgia in left
knee after exercise

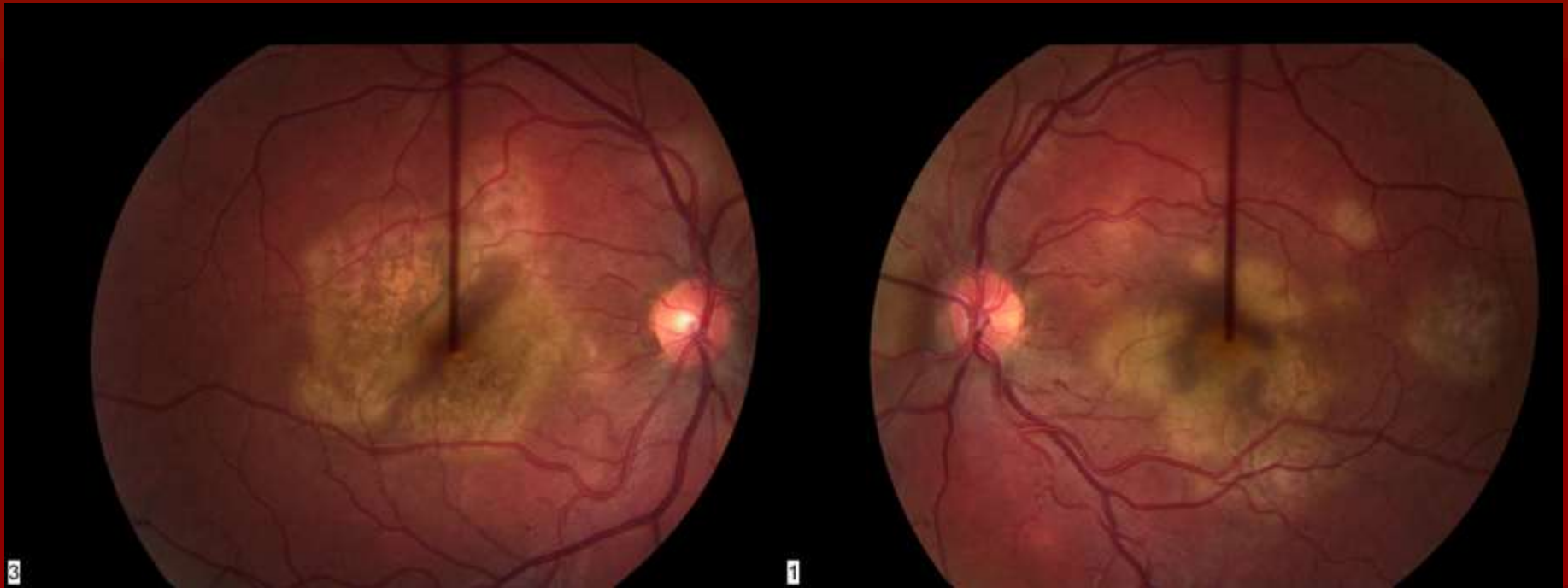
Meds: Birth control pill

Allergies: Penicillin

Objective

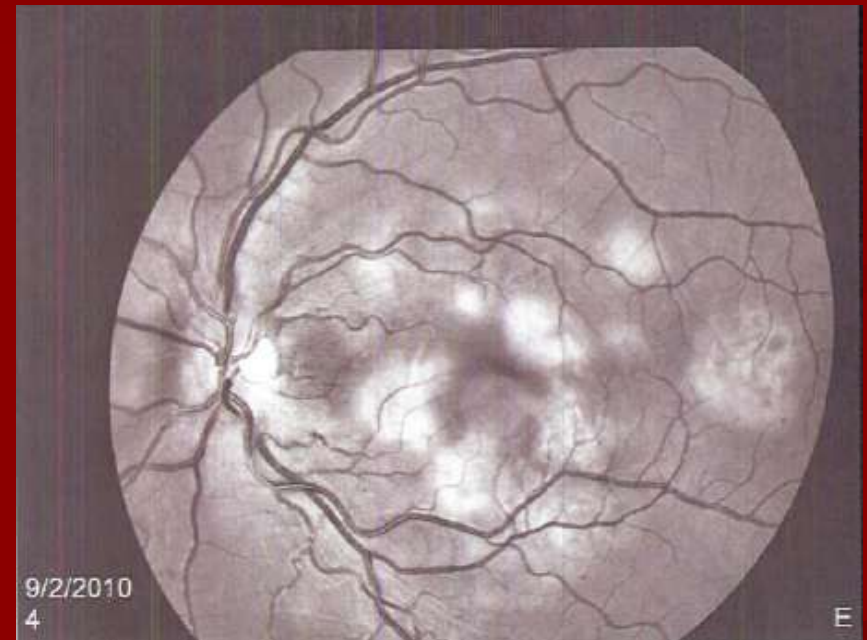
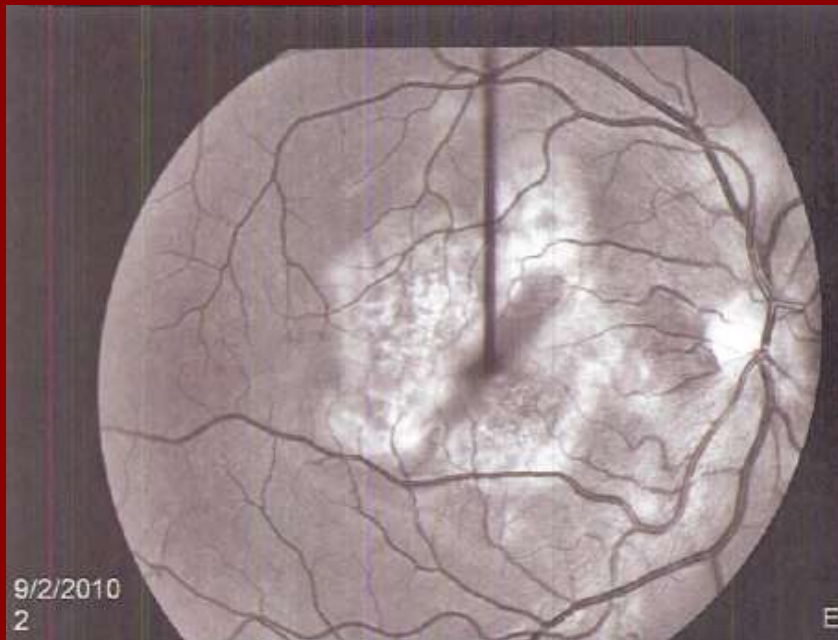
	OD	OS
<u>Va(Cc):</u>	20/30	20/125
<u>IOP:</u>	18	14
<u>SLE:</u> Clear K OU		
Deep Quiet AC OU		
Round pupils OU		
Clear lens		

Fundus photos



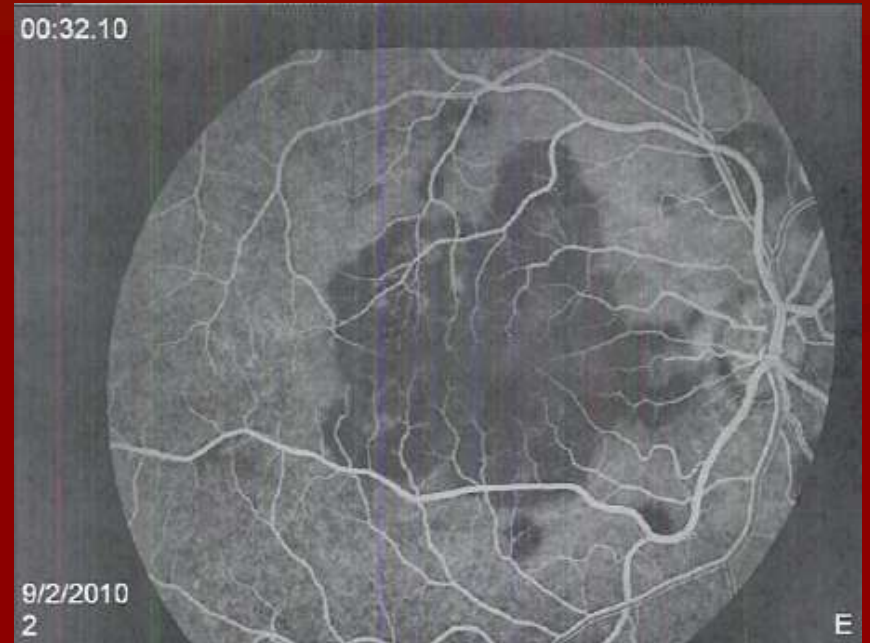
Color fundus photos of both eyes showing posterior pole grayish-yellow, fuzzy appearing lesions with distinct borders OU. Active lesions and areas of atrophy OD.

Red free photos



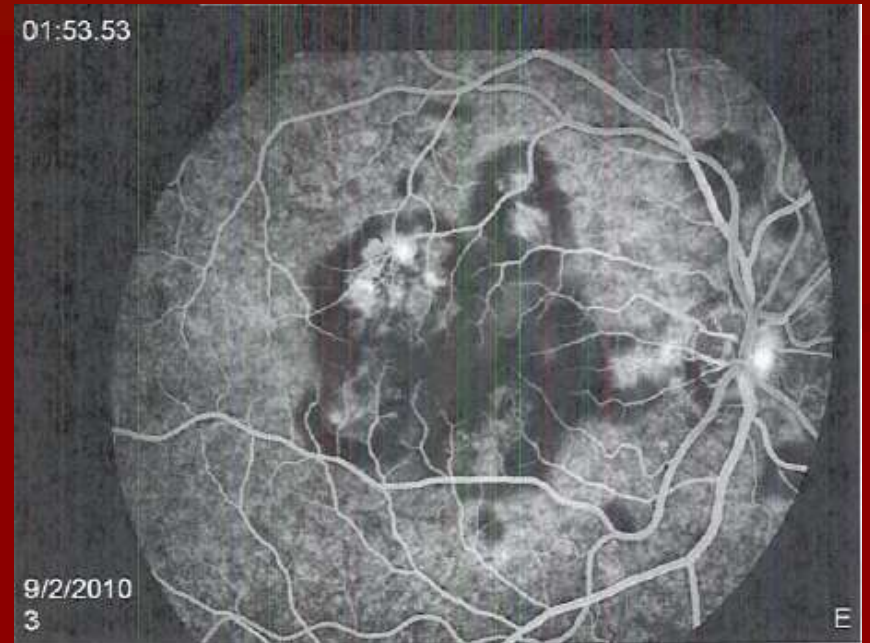
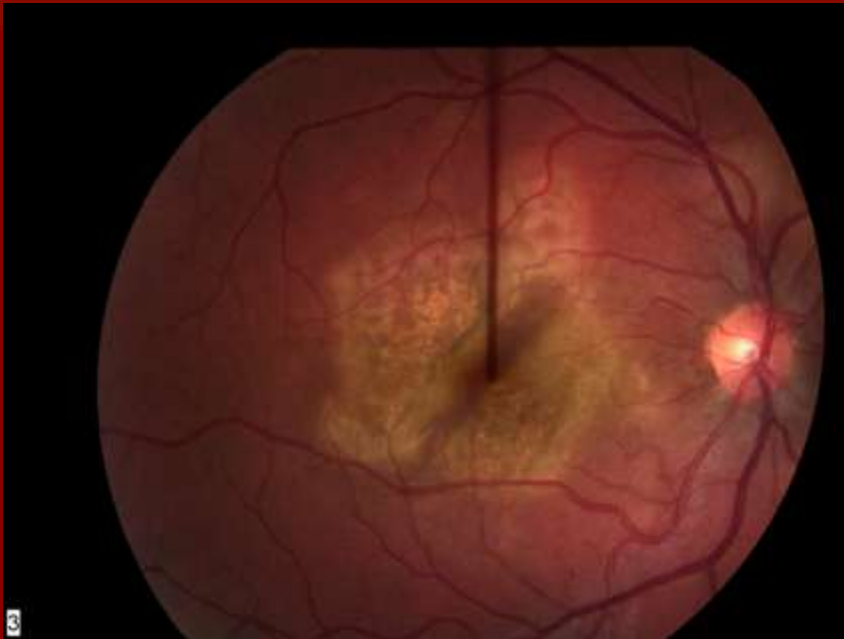
Red free photos of both eyes.

FA OD



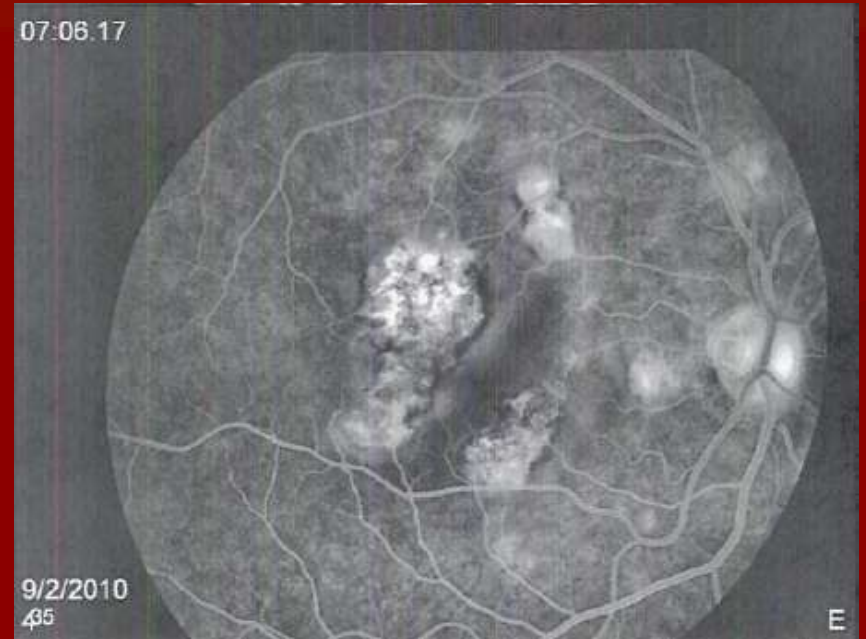
Early A-V phase, OD: central hypofluorescence with scattered hyperfluorescence.

FA OD



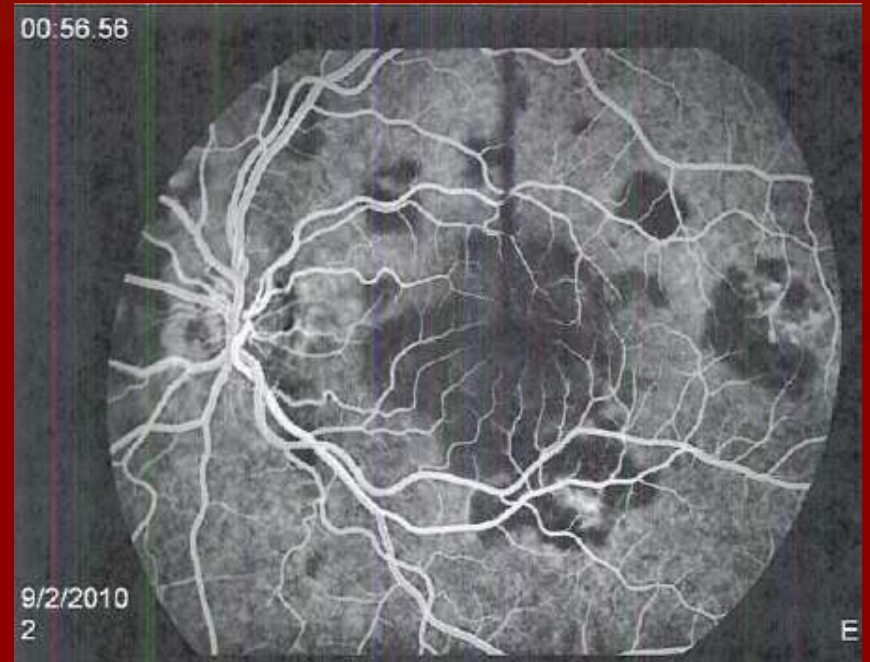
Mid AV phase, OD: patchy areas of hyperfluorescence scattered throughout the posterior pole with continued central hypofluorescence.

FA OD



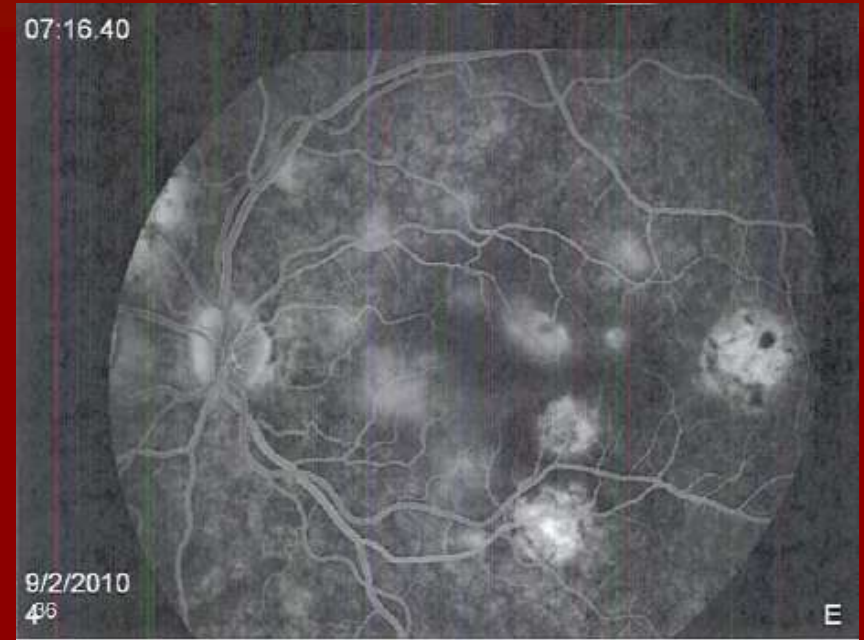
Late AV phase, OD: hyperfluorescent lesions representing both transmission defects and areas of staining.

FA OS



Mid AV phase, OS: patchy areas of hypofluorescence throughout the posterior pole.

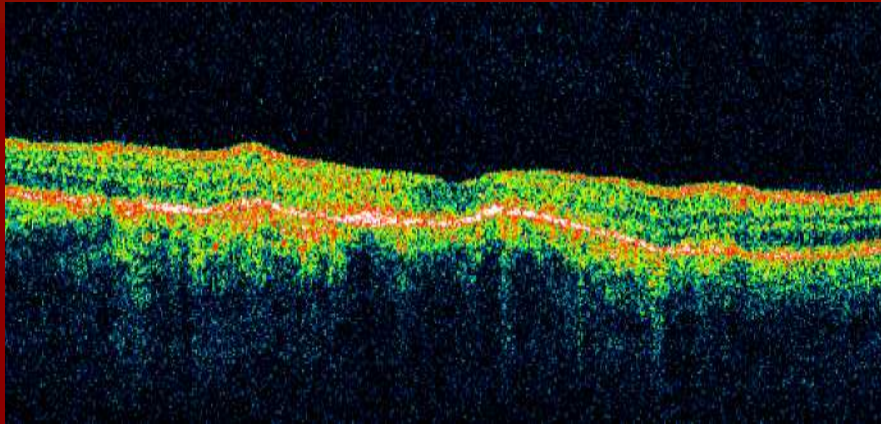
FA OS



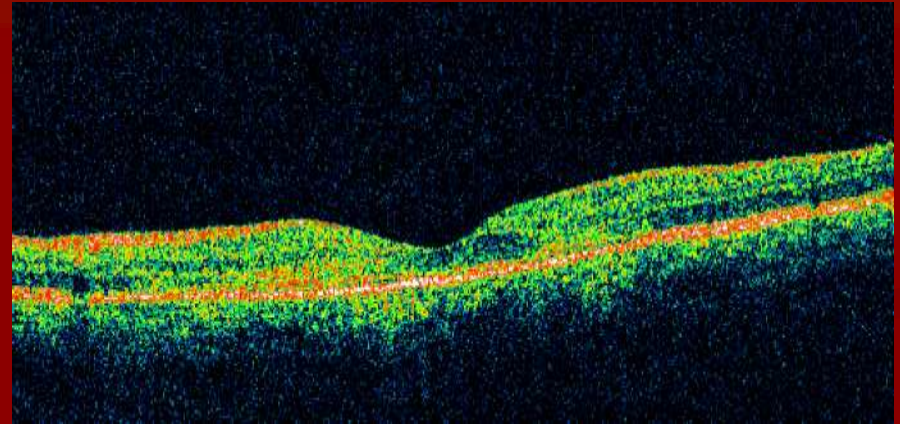
Late AV phase, OS: Hyperfluorescent areas throughout the posterior pole representing both staining and window defects.

OCT

OD



OS



TD-OCT – subRPE hyperreflectivity, OD>OS, with CME OS>OD.

Lab's

Negative Serology for- CMV, EBV, HSV

CBC – WNL

Chem - WNL

Impression

Serpiginous chorioretinopathy (ampiginous variant), OU, OS greater than OD.

Differential Diagnosis

- Acute multifocal posterior placoid pigment epitheliopathy (AMPPPE)
- Infection: Tuberculosis, Syphilis
- Inflammation: Posterior scleritis, Sarcoidosis
- Infiltrative: Lymphoma, Metastatic tumor

Serpiginous Choroiditis

- Rare, usually bilateral, chronically recurring inflammatory disease of unknown cause that primarily involves the choroid and RPE
- Affects healthy young to middle aged adults with most studies reporting a higher prevalence in men than women (HLA B7?)
- Asymptomatic until the macula is affected, VA dependent on the degree of foveal involvement
- Slit-lamp examinations is usually normal, the vitreous contains cells in one-fourth of patients.

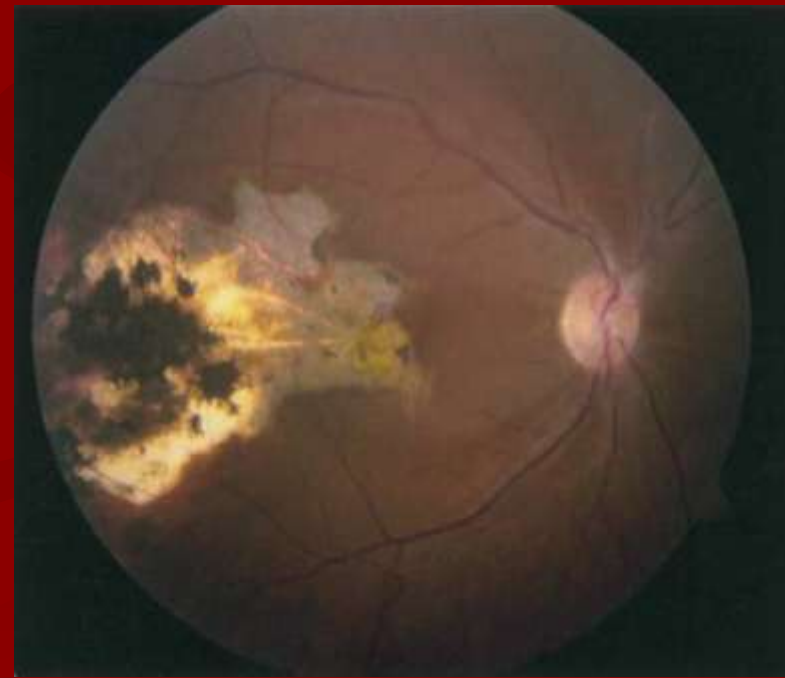
Serpiginous Choroiditis

- Peripapillary serpentine lesions in the fundus are characteristic (80%)
- Presents with creamy yellow sub-retinal patches originating in the peripapillary region and progressing centrifugally. Lesions resolve over 6–8 weeks leaving an area of atrophy involving both the choriocapillaris and the overlying RPE
- Recurrences (ranging from months to years) usually occur at the edges of previous atrophic scars



Macular Serpiginous Choroiditis

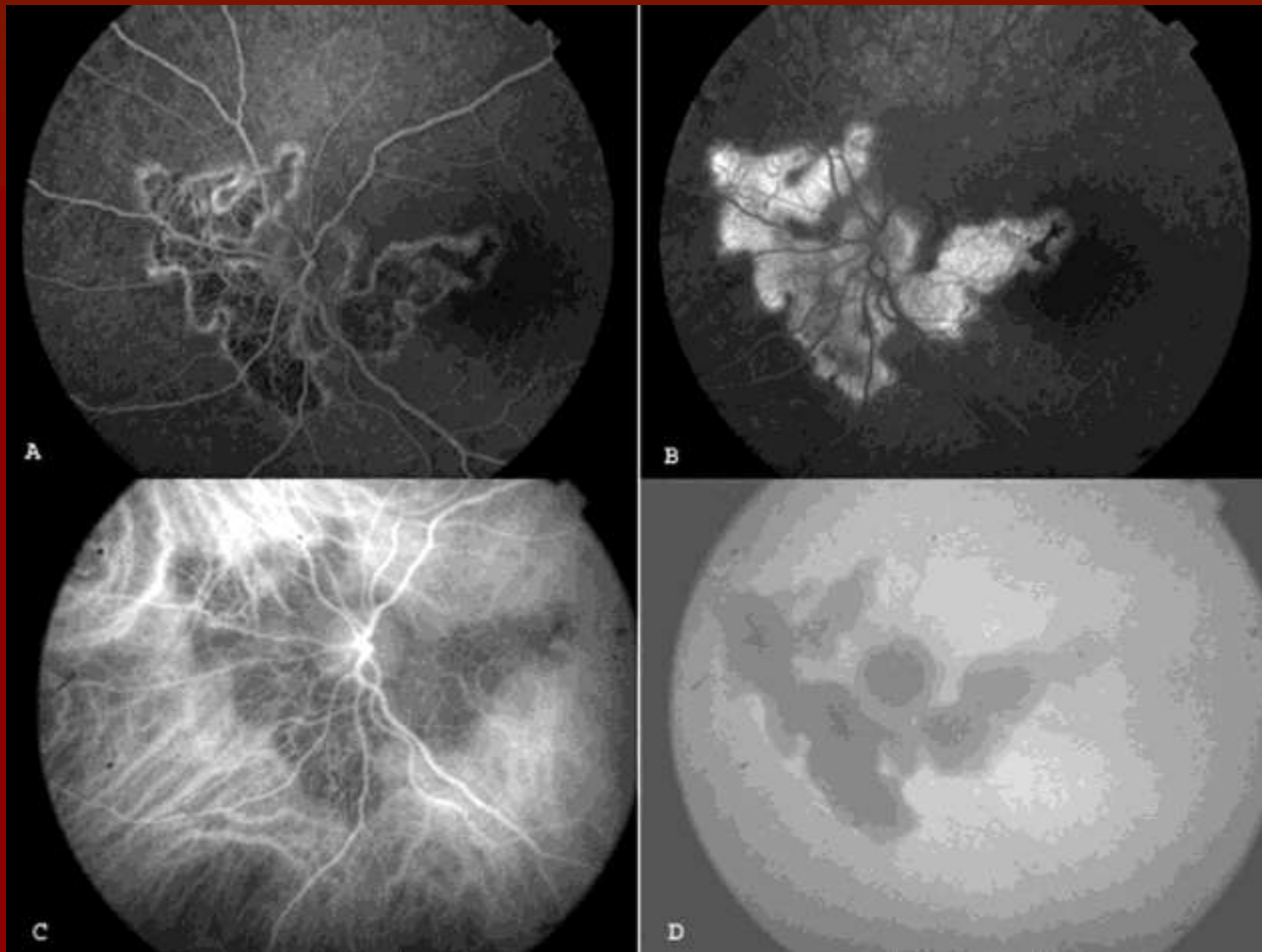
- Typical chorioretinal serpentine lesions in the macula but not continuous with the disk
- Early foveal involvement and higher risk of secondary choroidal neovascularisation
- Occasionally the lesions may also occur in the periphery in isolation or in a multifocal pattern (ampiginous choroiditis)



Investigations - FA

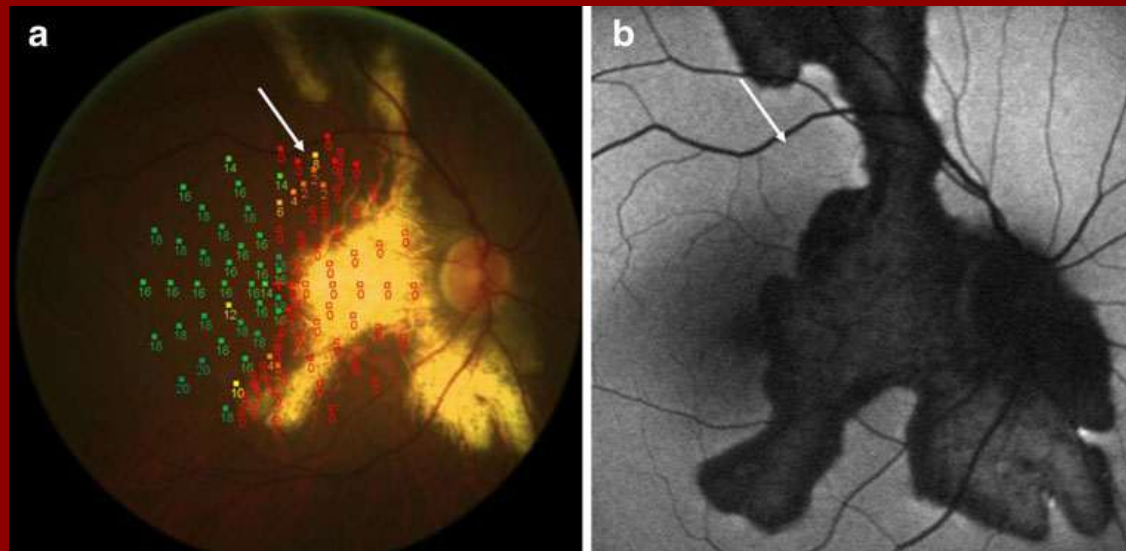
- Early hypofluorescence secondary to either atrophy of the choriocapillaris or blockage by the inflammed RPE
- Progressive hyperfluorescence at the margins of the atrophic lesions
- Diffuse late staining of the underlying sclera and fibrosis, as well as the area of inflammed RPE.
- Thus, the active lesions block fluorescein early and show diffuse staining and leakage in the late frames.

Investigations FA & ICG

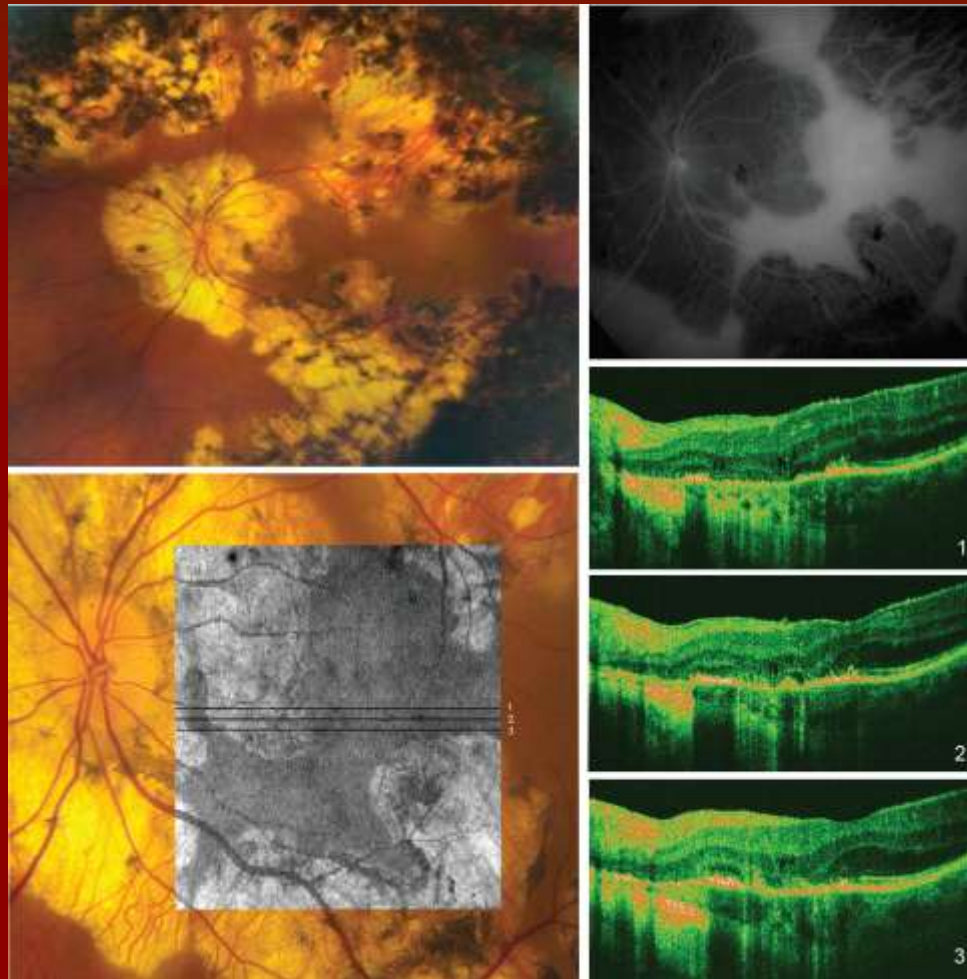


Investigations VF

- The visual field demonstrates absolute and/or relative scotomata corresponding to the geographic lesion
- Microperimetry: A reduction of retinal sensitivity in an apparently healthy area suggests a wider functional involvement of the retina, undetectable by morphologic evaluation alone. *Graefes Arch Clin Exp Ophthalmol.* 2010 Sep;248(9):1331-7

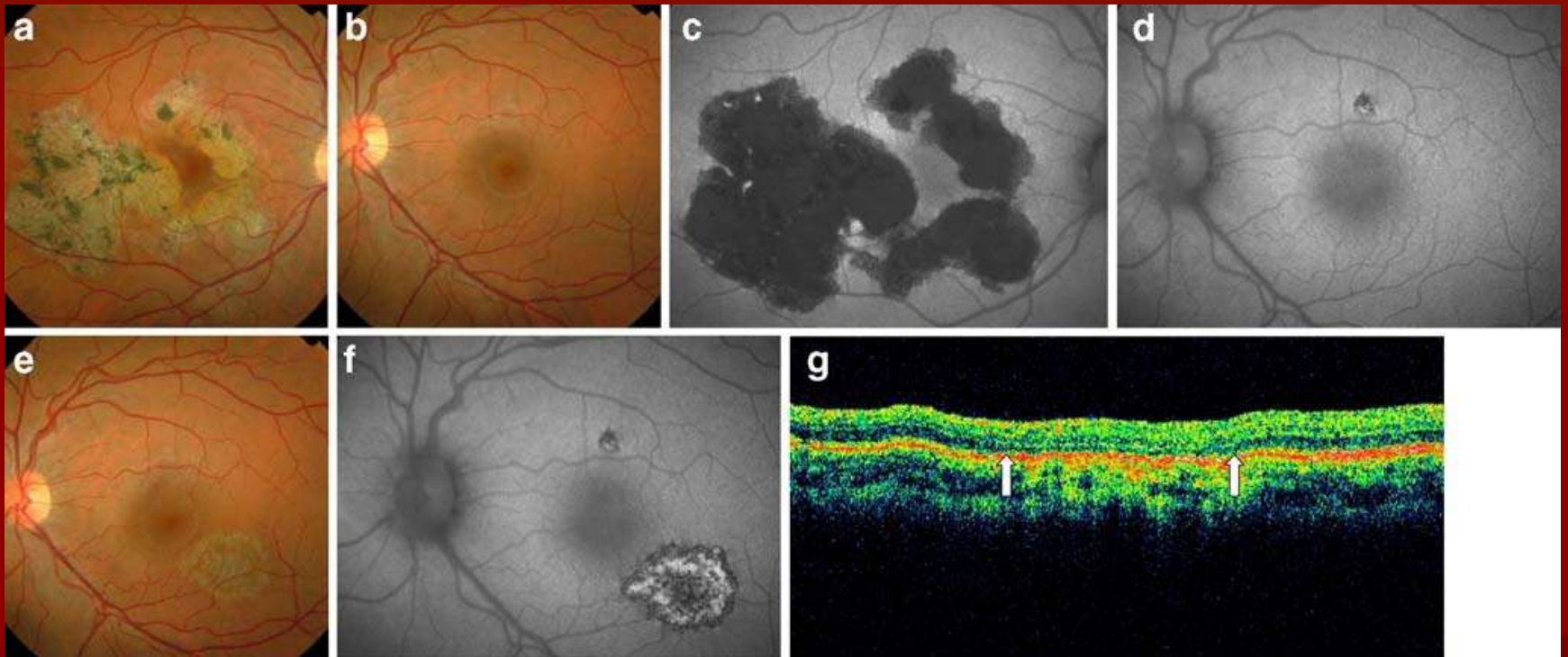


Investigations SD-OCT



Ophthalmic Surg Lasers Imaging 2008;39:S95-S98.

Investigations Fundus Autofluorescence



Graefes Arch Clin Exp Ophthalmol (2009) 247:179–185

Treatment

- Corticosteroids – effective in controlling the active lesions, does not alter the natural course of the disease and the final visual outcome
- Cyclosporine A mono-therapy - mixed results.
- Triple-agent therapy :cyclosporine A, azathioprine, and prednisone, controls inflammation rapidly and promotes visual recovery

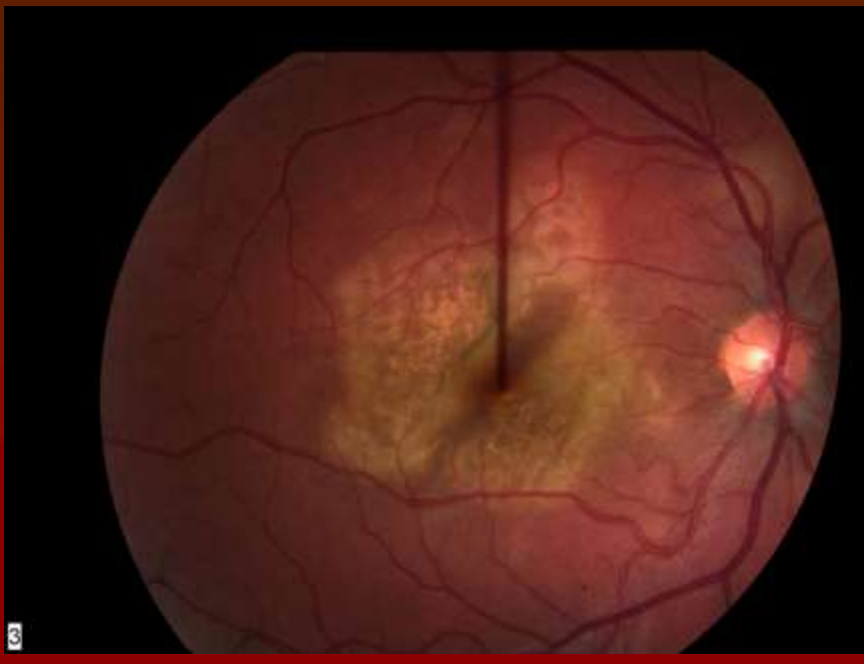
Hooper PL, Kaplan HJ: Triple agent immunosuppression in serpiginous choroiditis. *Ophthalmology* 98:944–51; discussion951-2, 1991

Prognosis

- As a result of the multiple recurrences up to 75% of the patients developed visual loss in one or both eyes with a final visual acuity of less than 20/200 in up to 25% of the eyes despite treatment.
- A common complication is choroidal neovascularization (13–35%)

Plan

- Triple-agent therapy immediately started: within two weeks regression of the active lesions and VA remained 20/30 OD and improved from 20/125 to 20/80 OS.
- Patient will remain on immunosuppression, with rapid tapering of systemic Prednisone, for at least 6 months.



References

- Pilotto E, Vujosevic S, Grgic VA, et al: Retinal function in patients with serpiginous choroiditis: a microperimetry study. *Graefes Arch Clin Exp Ophthalmol*. 2010 Sep;248(9):1331-7.
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- Altan-Yaycioglu R, Akova YA, Akca S, Yilmaz G: Inflammation of the posterior uvea: findings on fundus fluorescein and indocyanine green angiography. *Ocul Immunol Inflamm*. 2006 Jun;14(3):171-9.
- Lim WK, Buggage RR, Nussenblatt RB: Serpiginous Choroiditis. *Surv Ophthalmol*. 2005 May-Jun;50(3):231-44.
- Hooper PL, Kaplan HJ: Triple agent immunosuppression in serpiginous choroiditis. *Ophthalmology* 98:944–51; discussion951-2, 1991

Thank You