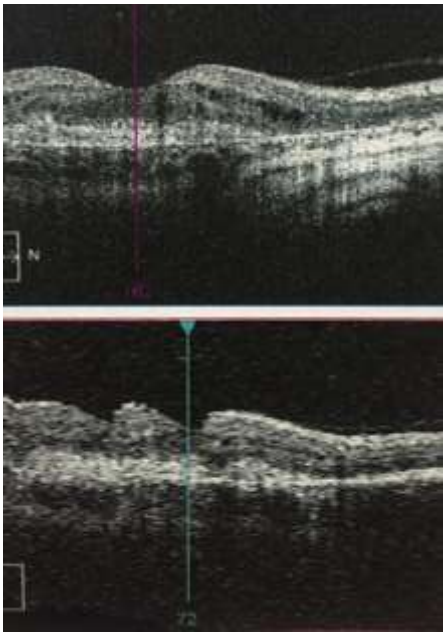
Serpiginous choroidopathy

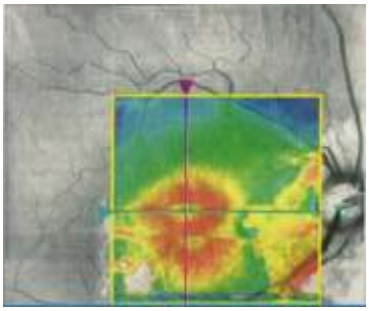
History

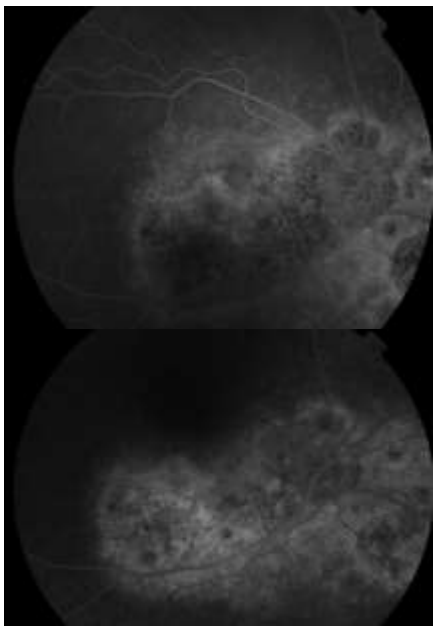
- 47 year old caucasian female
- Referred from optician due to HM VA right eye (LE – 6/6)
  - No subjective change in vision
  - No recent infections/night sweats/weight loss
  - No infectious contacts/recent travel/pets
- PMH: no diabetes/hypertension.
- Recruitment manager. Non-smoker

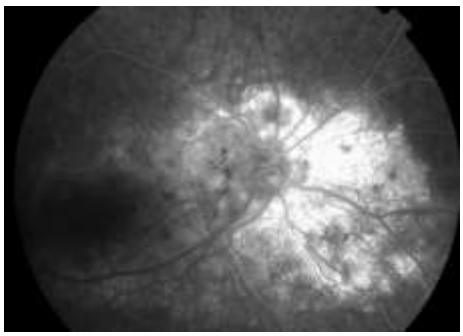
Examination

- VA:
  - Right eye – 0.98
  - Left eye – 0.00
- Anterior segment NAD
- IOP: right: 16; left 19
- No vitreous cells









- Suggested a diagnosis
  - Serpiginous choroidopathy
  - Bilateral, long standing disease
  - Advanced in the right eye
  - Complicated by CNV

Serpiginous choroidopathy

- **Rare bilateral progressive inflammatory disease of RPE, choroid and choriocapillaris**
  - 5% posterior uveitis
  - Men; young to middle-aged adults
  - HLA-B27 and retinal S-antigens
  - HSV and Factor VIII
- **Painless unilateral vision loss**
  - Blurry vision; photopsia; paracentral scotomas; metamorphopsia and visual field loss

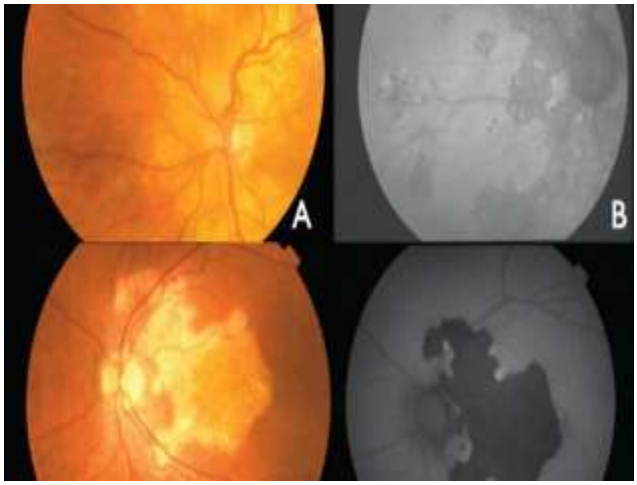
Signs

- Grey-yellow subretinal infiltrates spread from peripapillary region
- Atrophy with early dense hypopigmented areas
- Minimal anterior chamber cells and minimal vitritis

Differential

- **Inflammatory chorioretinopathies**
  - APMPPE
  - Multifocal chorioretinitis
- **Serpiginous-like choroidopathy (SLC)**
  - TB
  - Toxoplasmosis

Serpiginous-like choroidopathy



Classical SC

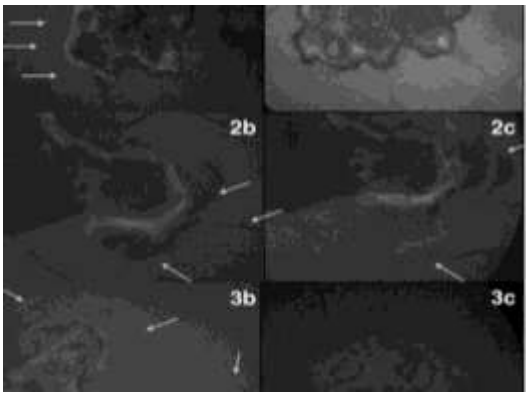
Infectious serpiginous like choroidopathy – *(Bartonella henselae)*

Careno et al, 2012

Serpiginous like choroidopathy vs serpiginous choroidopahty

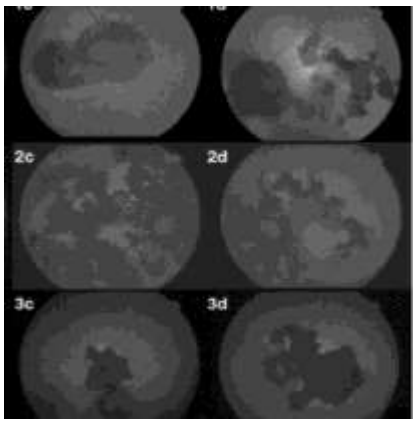
- SLC
  - Non-contiguous with the disc
  - Frequently multifocal
  - Peripheral involvement
  - Spare the fovea
  - Vitritis

Autofluorescence imaging



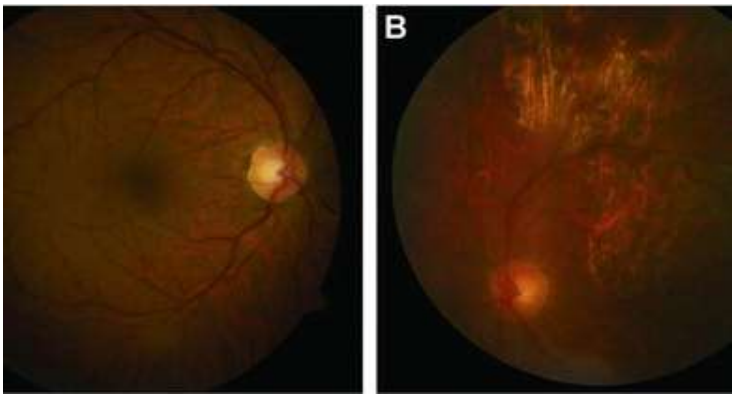
SC – active inflammation: dark areas with hyperautofluorescence at edges

Autfluorescence imaging



SC inactive: areas of hypoautofluorescence

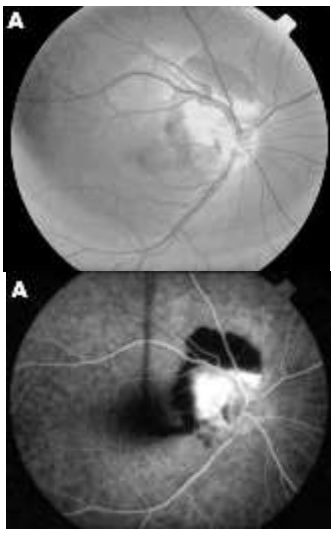
Antiphospholipid syndrome



Tang et al, 2009

CNV

- Accounts for severe visual loss; affecting young patients
- Infrequent complication of posterior uveitis:
  - Presumed ocular histoplasmosis (3.8%)
  - Punctate inner choroidopathy (17-40%)
  - Serpiginous choroiditis (<30%)
  - Vokt-Koyanagi-Harada (up to 9%)
- Extensive subretinal scarring



Lee et al, 2003

Treatment

- **Acute macular serpiginous choroidopathy:**
  - Corticosteroids (systemic/regional)
  - Pulse cyclophosphamide
  - Steroid sparing agents including azathioprine
- **Treatment of complications**
  - **CNV**
    - Laser – extrafoveal membranes
    - Anti-VEGF (used in a range of inflammatory CNV including presumed ocular histoplasmosis, punctate inner choroidopathy Mansour et al, 2012)

1. Ocul Immunol Inflamm. 2012 Dec;20(6):448-52. doi: 10.3109/09273948.2012.723236. Epub 2012 Nov 19.**Distinctive clinical features of idiopathic versus infectious serpiginous choroidopathy**Carreño E1, Portero A, Herreras JM, Calonge M, Foster CS.

- Br J Ophthalmol. 2003 Sep; 87(9): 1184–1185.
- PMCID: PMC1771863
- **Serpiginous choroidopathy presenting as choroidal neovascularisation**
- D K Lee,1 W Augustin,2 R R Buggage,2 and E B Suhler2