Endogenous Endophthalmitis due to *Candida Albicans* from an Infected Port-A-Cath

Michelle Serrano OD, Melanie Kane OD, Roberto Diaz-Rohena MD, and Dipti Singh OD MPH
South Texas Veterans Health Care System

**Abstract:** Endophthalmitis is an intraocular infection having multiple etiologies with the rarest occurring endogenously. Proper lab testing must be done to differentiate fungal versus bacterial etiology and drive the course of treatment.

**I. Case History**
- 77 y/o Caucasian male
  - Sudden, painful decreased vision OD x 1 week associated with fever and malaise
  - Low grade fever 100°F x 1 week
  - Pain assessment 5/10
- OHx: Mild NPDR OU, CATs OU, pterygium OD
- MHx: Type 2 DM, HL, HTN, dementia
- Medications:
  - Carvedilol 25mg 1 tab PO BID
  - Clonidine patch 0.1mg/24 hr one patch to upper outer arm or chest tue-friday@9:00am
  - Docusate ca cap 240mg 1 tab PO BID
  - Hydrochlorothiazide 25mg 1 tab PO/daily
  - Levothyroxine NA 0.075mg 1 tab PO/daily
  - Memantine 10mg 1 tab PO/daily
  - Quetiapine fumarate 50mg ½ tab QAM
  - Quetiapine fumarate 200mg ½ tab QHS
  - Ranitidine HCL tab 150 mg BID
  - Non-VA ASN 81mg PO/daily
- Allergies: tomatoes (rash), Penicillin (rash)
- Social Hx: 1 can of chewing tobacco/3 days
- Other information:
  - MRSA Septicemia March-June 2015
  - Indwelling venous catheter left chest placed in July 2015

**II. Pertinent findings**
- Visit #1:
  - BCVA 20/400 OD, 20/50-2 OS
  - EOMs, Pupils, and CVF- normal
  - IOP- 8 mmHg OD/11 mmHg OS
  - SLE- nasal pterygium OD, Descemet membrane folds OD, endothelium dusting OD, 2+ cells and flare
  - DFE- 0.40 V/H C/D OD/OS, 2-3+ vitreous debris/granulomas in OD, 1+ white fluffy lesion temporal to macula with an associated hemorrhage OD, scattered DBHs and MAs OS
  - Lab Tests- CBC profile, CHEM I profile, sedimentation rate, CRP
- 1 week FU:
- BCVA CF OD, 20/50-2 OS
- EOMs, Pupils, and CVF - normal
- IOP- 10 mmHg OD/9 mmHg OS
- SLE- nasal pterygium OD, 0.5+ cells
- DFE- 0.40 V/H C/D OD/OS, 1-2+ vitreous debris/granulomas in OD, improvement seen w/1+ white fluffy lesion temporal to macula with an associated hemorrhage OD, 2/3 disc diameter CWS along superior arcade OS

- 5 week FU:
  - BCVA 20/100 OD, 20/50 OS
  - EOMs, Pupils, and CVF - normal
  - IOP- 10 mmHg OD/10 mmHg OS
  - SLE- nasal pterygium OD, 0.5+ cells
  - DFE- 0.40 V/H C/D OD/OS, no vitritis or retinitis OU, CWS and large retinal hemorrhages in all 4 quadrants (-) NVE and (-) NVD OU

- 3 mo FU:
  - BCVA 20/100 OD, 20/50 OS
  - EOMs, Pupils, and CVF - normal
  - IOP- 10 mmHg OD/10 mmHg OS
  - SLE- nasal pterygium OD
  - DFE- 0.40 V/H C/D OD/OS, no vitritis or retinitis OU, exudates and few Mas with no leakage temporal to FAZ OD, CWS and large retinal hemorrhages in all 4 quadrants with vessel dilation in the far periphery OU (-) NVE and (-) NVD OU

II. Differential diagnosis
- Fungal endogenous endophthalmitis
- Bacterial endogenous endophthalmitis
- Uveitis
- Sympathetic Ophthalmia
- Intraocular tumor

IV. Diagnosis and discussion
- Endogenous endophthalmitis is a rare finding and only accounts for 2-15% of all endophthalmitis cases\(^1\). Causation, although rare, can be a *Candida* species or bacterial. Systemic Candida infections are related to immunocompromised, septicemic, or postsurgical procedure patients. Retinal findings may be the only sign of systemic Candida infections with blood cultures often being negative for the species\(^2\).

V. Treatment, management
- Removal of indwelling venous catheter from left chest
- Culture from Port-A-Cath, blood culture, urinalysis
- Fluconazole 200 mg tab PO/ BID for 44 days w/ monitoring CBC and LFT
- Tramadol 50 mg tab PO TID or PRN
- Lucentis 0.3 OU x3 every 6 weeks

Bibliography:
VI. Conclusion

- Careful history taken for trauma and surgery must be made
- Repeat blood cultures if there is no related laboratory abnormality from the first sample

Comments: Mac 512x128 OCT and Mac HD 21 Line Raster available