

## EVS

**Introduction:** The EVS is a randomized controlled clinical trial sponsored by the NEI to determine the role of immediate pars plana vitrectomy and systemic treatment in the management of postoperative endophthalmitis.

**Eligibility:**

- ☞ Clinical signs & symptoms of endophthalmitis within 6 weeks
- ☞ VA 20/50 to LP
- ☞ Cornea and AC clear enough to see some part of iris
  - Cornea clear enough to do VIT
  - Vitreous clouding to obscure second order arterioles
  - No ocular disease to preclude VA 20/100

**Treatment:**

- ☞ Treatment groups:
  1. VIT + i.v. Ab's
  2. VIT + no i.v. Ab's
  3. TAP + i.v. Ab's
  4. TAP + no i.v. Ab's
- ☞ All pts had 0.1ml AC TAP
- ☞ VIT pts had vit biopsy/aspirate
- ☞ TAP pts had 0.1 to 0.3 ml vit specimen either by needle or vitrectomy instrument
- ☞ All patients received:
  1. Amikacin (0.4mg in 0.1 ml) intravitreal
  2. Vancomycin (1.0 mg in 0.1 ml) intravit
  3. Vancomycin (25mg in 0.5ml) & ceftazadine (100mg in 0.5ml) (amikacin 25mg in 0.5ml if allergic to pen) & dexamethasone (6mg in 0.25ml) subconjunctival
  4. Topical vanco (50mg/ml) & amikacin (20mg/ml) q1hr if wound leak or infected wound otherwise q4hr
  5. Topical Atropine 1%
  6. Topical Pred Forte
  7. Prednisone 30 mg BID for 5 to 10 days
- ☞ I.v. Ab's patients received (for 5 to 10 days):
  1. Ceftazadime 2g q8hrs (cipro 750mg BID in allergic pts)
  2. Amikacin 7.5mg/kg load, 6mg/kg q12hrs

☞ Culture:

AC: chocolate, thioglycolate, Sabouraud

AC/Vit: gram stain

Vit fluid through membrane: chocolate, thioglycolate or anaerobic media, Sabouraud

☞ Reinjection & VIT for TAP group if:

1. VA <5/200
2. No RR
3. Growth on culture
4. Increase hypopion, corneal ring infiltrate, worse pain

**Outcome:**

Visual acuity @ 3, 9 & 12 months.

Media clarity grading system.

**Results:**

Stats:

Mean age: 75yrs  
Sex: 43% men  
DM: 14%  
HTN: 40%  
Primary cat: 95% (5% secondary)  
Median time: 6 days  
Blurred VA: >90%  
Pain: 75%  
VA < 5/200: 86%  
VA=LP 26%  
RAPD 12%  
Ring infil: 5%  
No ret vessels: 80%  
Absent RR: 67%

Cultures:

none: 18%  
equivocal: 13%  
GPCoagN: 47%  
Other GP: 16%  
GN: 3%  
>2 3%

Additional VIT for TAP group 7%

Media clarity:

At 12 month visit no difference between groups.

