

Eye Enucleation for Endophthalmitis in Pregnancy

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- **Endophthalmitis**
 - Inflammation of the inner coats of the eye, resulting from intraocular colonization of infectious agents with exudation within intraocular fluids
 - Can lead to systemic disease, vision loss and possibly enucleation
 - **Causes in pregnancy:**
 - Bacteremia/Sepsis
 - UTI/Pyelonephritis
 - Chorioamnionitis
 - Endocarditis
 - Fungal Infections
 - Most Important Pathogens in Pregnancy → Candida & Gram (+) bacteria (Strep & Staph)

Case Presentation

35 y.o. G3P2002 with a PMH of T2DM and thrombocytopenia presents at 24w2d with eye pain and vision changes

Initial Evaluation and Management:

- **Exam:** Febrile, tachycardic, and hypertensive
- **Labs:**
 - Platelets 31,000
 - Elevated CRP, lactate and transaminases
 - Reassuring fetal ultrasound
- Started on empiric antibiotics (Vanc & Cefepime)
- Magnesium started for preE
- Blood and corneal cultures positive for group B strep
- MICU for eye drops and monitoring

ICU Course

- TEE: aortic and mitral valve vegetations
- Intravitreal antibiotics and antifungals.
- Multidisciplinary goals of care discussion
- Despite treatment, the patient's left eye progressed to necrosis which increased the risk of globe rupture.
- Decision to proceed with eye enucleation

Surgical & Anesthetic Plan

- Fetal monitoring present throughout surgery
- C-section tray available with OB team on standby
- Induction: GETA with RSI

Discussion

- Management of acute endophthalmitis
 - Intravitreal broad-spectrum antibiotics, +/- systemic antibiotics, and eye enucleation in fulminant infections
- Multidisciplinary discussions & planning involving Ophthalmology, MFM, Anesthesia, Infectious Disease, and Neonatology
 - Antibiotic selection
 - Urgency of surgery
 - Fetal monitoring strategy in the ICU and OR
 - Perioperative timing based on gestational age
- Things to Address as Anesthesiologists:
 - Sepsis Risk
 - Aspiration Prophylaxis
 - Hemodynamic Management