Perioperative Management of Uveitic Cataract

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Perioperative management of uveitic cataract

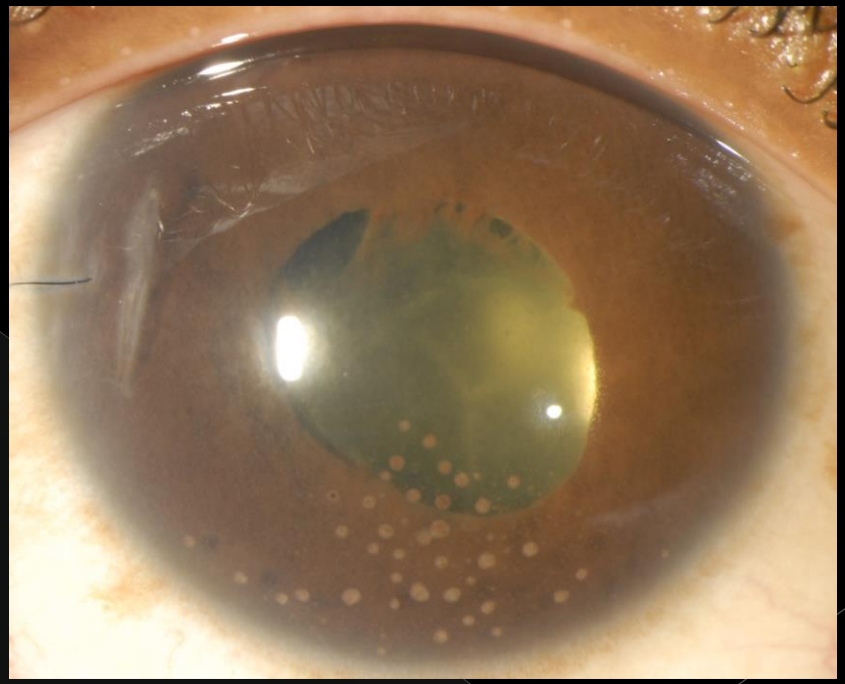
- FAQ
  - How many months of inactivity are required before CE/IOL?
  - What is the maximum AC cell considered “inactive”?
  - Should uveitis patients receive perioperative immunosuppression?

Challenges in perioperative cataract management

- Preoperative
  - Establishing disease control prior to surgery
  - Need for adjunctive therapies (e.g. tube shunt, periocular corticosteroids)
- Intraoperative
  - Small pupil management, posterior synechiae
  - Intraocular lens choice (PMMA vs. acrylic)

Challenges in perioperative cataract management

- Postoperative
  - Cystoid macular edema
  - Synechiae formation
  - Anterior displacement of IOL
  - Fibrin membrane formation
  - Epiretinal membrane/Vitreomacular traction



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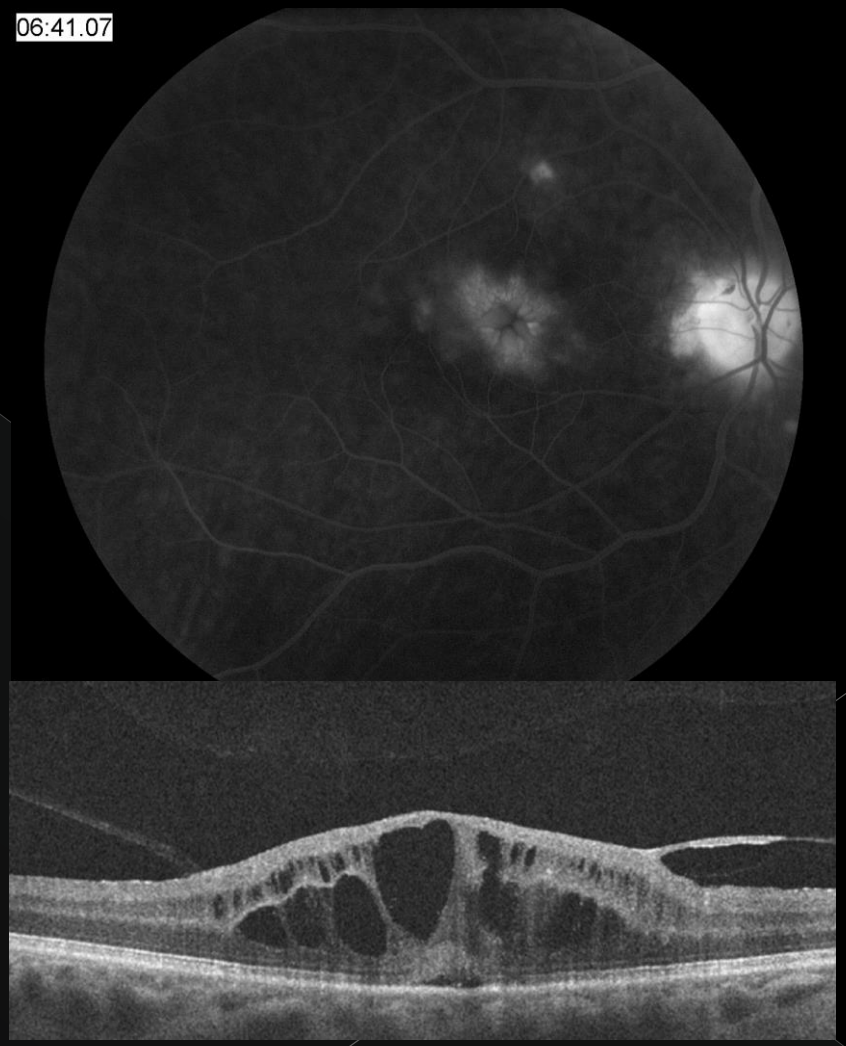


Preoperative considerations

- **Three months or greater of disease inactivity** prior to CE/IOL +/- synechialysis
- Rare cell acceptable although close postoperative follow-up needed
  - Chronic disruption of blood-aqueous barrier may make anterior chamber inflammation evaluation difficult

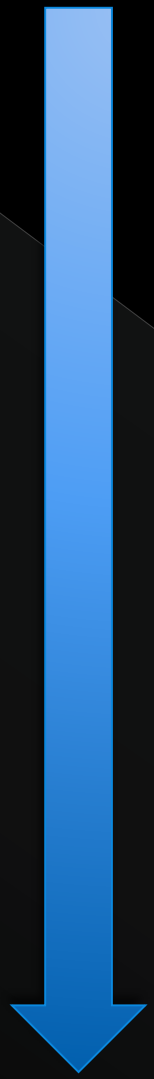
Perioperative immunosuppression for cataract surgery

- **Many options to consider for uveitis**
  - Routine postoperative medications
  - Topical corticosteroids/NSAIDS for prevention of post-op CME
  - Periocular corticosteroid injections
  - Oral prednisone/Medrol dose pack
  - IV corticosteroids (Solumedrol, Decadron)

Risk stratification

Uveitis: Risk of flare-up	Options
Low	Topical corticosteroids/NSAIDS
Moderate	Topical corticosteroids/NSAIDS +/- Periocular vs. systemic corticosteroid
High	Topical corticosteroids/NSAIDS + Periocular vs. systemic corticosteroid +/- Intra-op IV corticosteroid

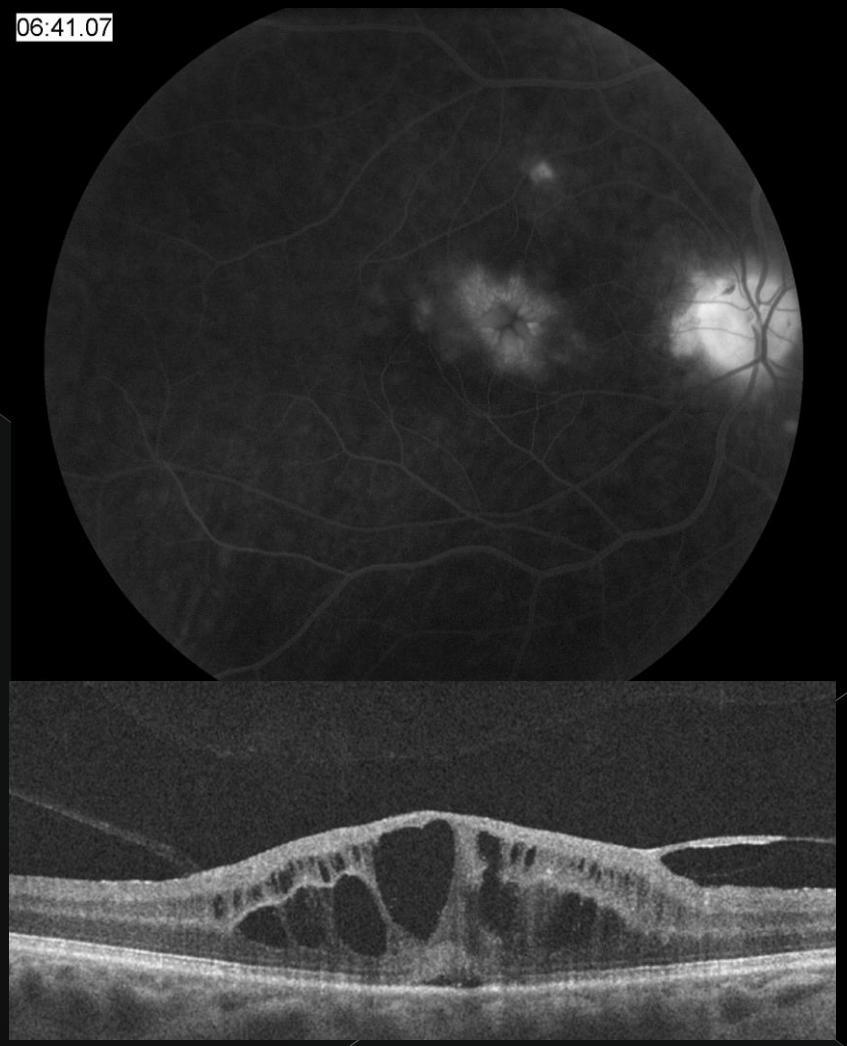
Risk stratification



Uveitis syndromes
Low Unilateral, long period of inactivity, elderly Birdshot retinochoroidopathy Punctate inner choroidopathy APMPPE, serpiginous
Moderate Episcleritis, scleritis Intermediate uveitis HLA-B27-associated disease Behcet's disease
High Sarcoidosis VKH syndrome Sympathetic ophthalmia Juvenile idiopathic arthritis

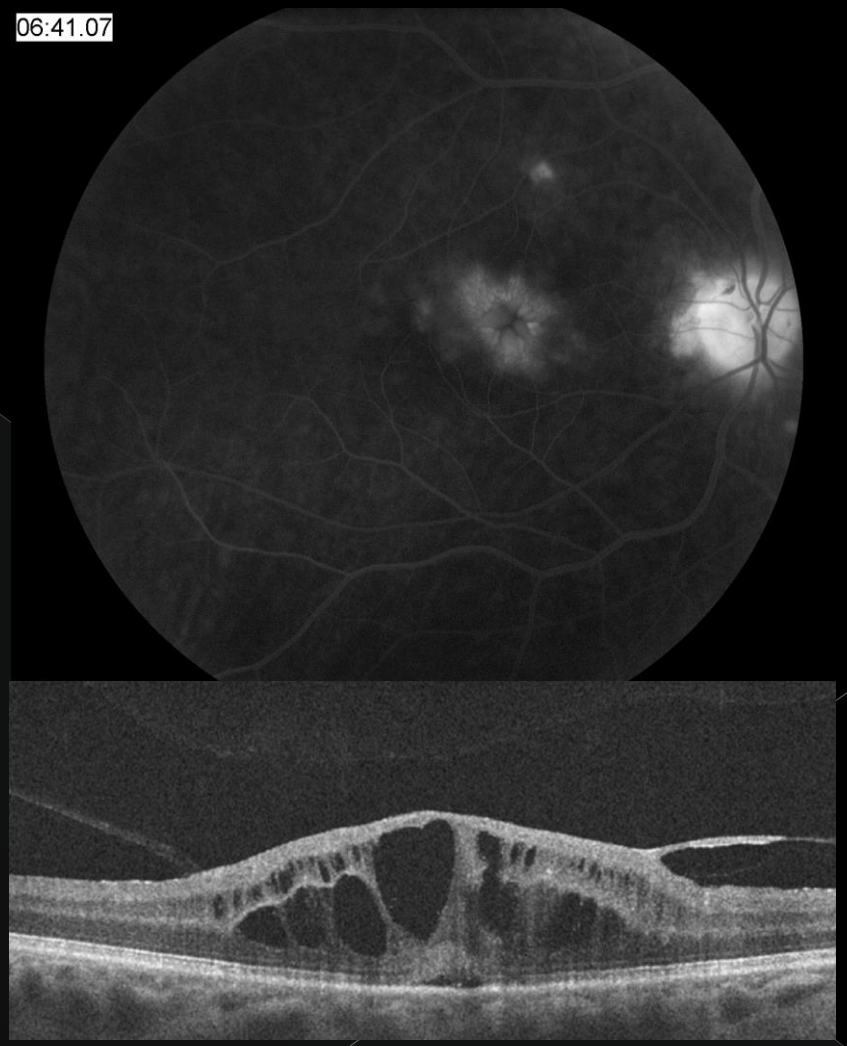
Post-operative CME with iritis

- DDx
  - Irvine-Gass syndrome
  - Retinovascular disease
  - Retained lens fragments
  - IOL displacement/ UGH syndrome
  - Endogenous uveitis
    - Infectious (Viral, Fuchs)
    - Noninfectious
  - Chronic endophthalmitis



Workup

- Thorough History and Exam (Scleral depression for retained lens fragments)
- Fluorescein Angiogram
- OCT
- UBM
- Laboratory testing including PCR if viral etiology is a consideration



Recalcitrant postop iritis

- Management considerations
  - Is there any evidence of infection?
    - IOP asymmetry (e.g. herpetic uveitis, CMV)
  - Is this truly isolated, anterior uveitis?
  - Exclude "pseudo" uveitis
    - Pigment dispersion syndrome
    - Subclinical retinal detachment or retinal tear(pseudophakic, aphakic)

Recalcitrant postop iritis

- **Is there any evidence of infection?**
  - Viral-associated uveitis/keratouveitis
    - Herpes zoster
    - Herpes simplex (HSV-1, HSV-2)
    - CMV (Fuchs heterochromic iridocyclitis and Posner-Schlossman syndrome)
    - Rubella (Fuchs heterochromic iridocyclitis)
  - Syphilis (RPR, MHA-TP)
  - Tuberculosis (PPD, Quantiferon-TB-Gold test)

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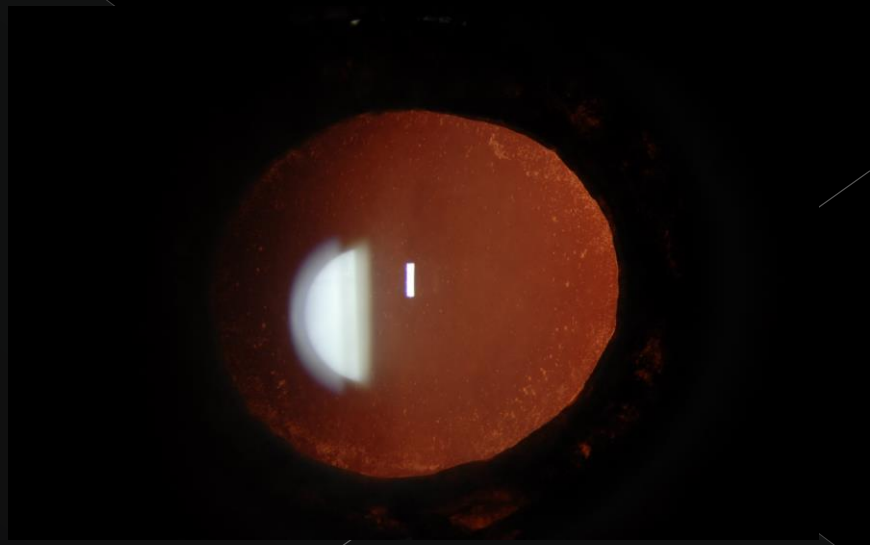
Chee SP, *Am J Ophthalmol* Aug 2008
Quentin CD, *Am J Ophthalmol* July 2004

Recalcitrant anterior uveitis

- 54 year-old patient
- Repeat flares of uveitis OS despite chronic topical corticosteroids
- IOP asymmetric
- Mild cataract



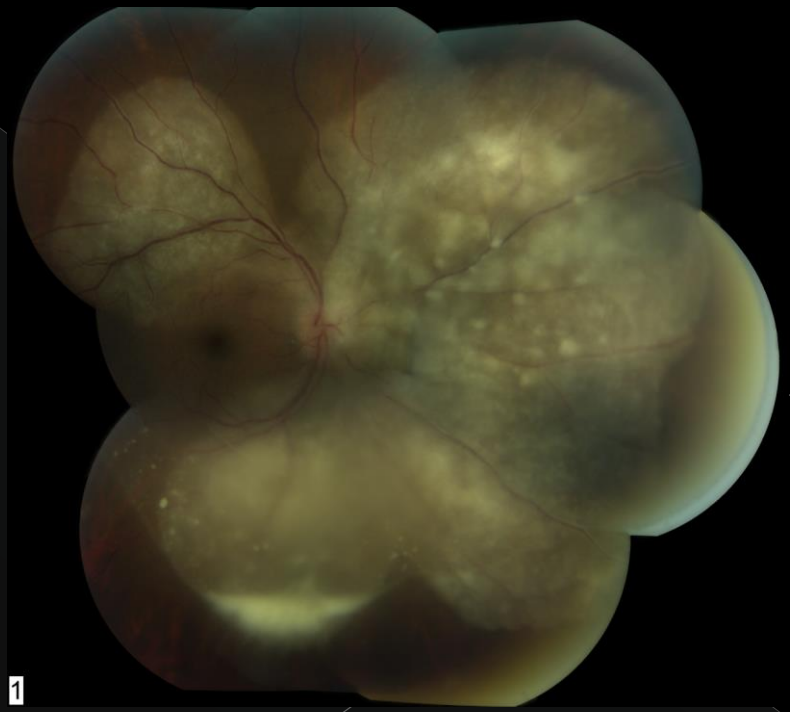
Iris heterochromia

Dx: CMV-associated anterior uveitis (At-risk for postop inflammation)

Tx: Valganciclovir, Topical prednisolone acetate 1%

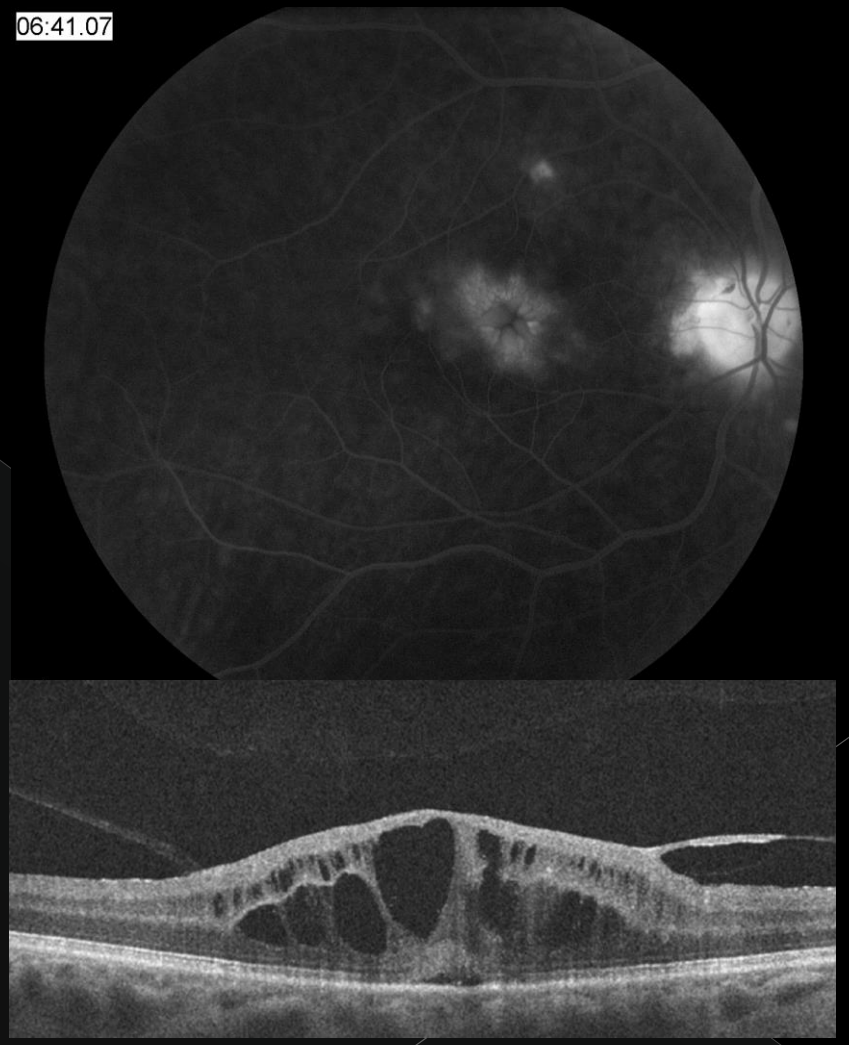
Recalcitrant postop iritis

- **Is this isolated anterior uveitis?**
- **Is there any evidence of posterior segment involvement?**
  - Vitreous cells
  - Optic disc edema
  - Vasculitis
  - Chorioretinal lesions



Irvine-Gass syndrome

- Options
  - Topical NSAIDs
  - Difluprednate
  - Prednisolone acetate
  - Combination
  - Intravitreal therapy
    - Corticosteroids
    - Anti-VEGF (Steroid responders or patients with retinal vascular disease)



Summary

- Management of cystoid macular edema and postop iritis throughout entire perioperative period
- Diagnostic workup focused on common entities (Irvine-Gass syndrome) but also evaluation of mechanical, infectious, and vascular disease
- Multiple therapeutic choices warrants evaluation of risks/benefits of each option