Optometric Postoperative Cataract Surgery Management

David Dinh, OD

March 10, 2015

Financial Disclosures

- Oak Cliff Eye Clinic
- Dallas Eye Consultants

Comanagement

- Joint cooperation between two or more specialists to help improved quality outcomes

Overview

- Qualifications and Considerations
- Expectations
- Observations
- Getting paid
- On the Horizon

Preoperative Qualifications

- Visual Consideration
  - BCVA 20/40 or worse
  - Glare testing reduces BCVA by 2 lines beyond 20/40
- Activity of Daily Living Complaints
  - A meaningful interference to activities within a patient's life or environment
    - Ambulation
    - Driving – legal driving in Texas
    - Reading
    - Safety

Preoperative Considerations

- Ocular health
  - Diabetic Retinopathy
    - Diabetic macular edema
    - Active PDR with poor retinal visualization
  - Glaucomatous consideration
    - Primary angle closure suspect/glaucoma
  - Corneal Health
    - Endothelial dystrophy
    - Pterygia-induced astigmatism

Preoperative Considerations

- Ocular Health
  - History of Uveitis
    - Conservative approach with 3 months of non-inflammed eye
  - History of trauma
    - Zonular attachments
  - History of refractive surgery
- Systemic Health
  - Meds: Flomax and other alpha-adrenergic antagonists

Expectations

- Know your surgeon
  - Anesthesia:
    - General anesthesia
    - Topical anesthesia vs. retrobulbar/periorbital block
  - Surgical technique and equipment
    - Standard phacoemulsification
    - MICS
    - LRI vs. spherical equivalent
  - Incision site locations
    - Sutures
  - Pre- and post-operative drop regimen
    - Typical regimen includes preoperative prophylactic antibiotic and NSAID
    - Status-post addition of topical steroid status-post
    - Discontinuation varies per surgeon protocol and patient healing

Day 1

- Examination
  - Visual Acuities
  - Slit lamp examination
    - Intraocular pressure
    - Corneal edema
    - Anterior chamber reaction
    - IOL placement: PC, Sulcus, AC
    - Retained lens material
  - Post-operative drops

Day 1 - Complications

- Seidel Positive
  - Risk of iris prolapse
  - Shallow anterior chamber
    - Angle closure
    - Choroidal detachment
  - Treatment:
    - Bandage contact lens if AC well-formed
    - Refer back to surgeon otherwise

Day 1 - Complications

- Increased IOP – retained viscoelastic
  - <30mmHg – topical IOP-lowering drop
  - >30mmHg – consider therapeutic paracentesis or "burp"
    - Surgical needle – 25 gauge, sterile
    - Sterile scleral depressor – autoclave vs. iodine and alcohol
    - Goal: mid-teens
    - Topical antibiotic after IOP stabilized and confirmed Seidel negative
  - Other considerations:
    - Poorly controlled glaucoma
    - Poor endothelial health

Day 1 - Complications

- Corneal Edema
  - Mechanical
    - High flow phacoemulsification
    - Variable degree of edema
    - Increased IOP
  - Toxic Anterior Segment Syndrome – acute, severe non-infectious inflammatory response
    - Limbus-to-limbus edema
    - Presence of hypopyon – no vitreal involvement
    - Variable levels of pain
    - Increased IOP
    - Treatment: Increase topical steroid Q1H
      - Consider Durezol

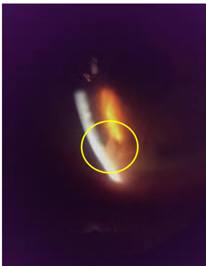
Day 1 - Complications

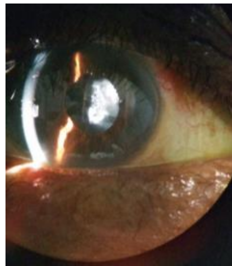
	TASS	Endophthalmitis
Cause	Non-infectious response	Bacterial, viral, fungal
Onset	**12-24 Hours****	**2-7 Days**
Signs/Symptoms	• Blurry VA • Pain: none to moderate • **Severe corneal edema** • **Increased IOP** • **Irregular/unresponsive pupil** • AC reaction: moderate to severe with hypopyon, fibrin, cells • **No vitreal involvement**	• Decreased VA • Pain: variable • Lid swelling and edema • Hyperemia and • AC reaction: severe with hypopyon • **Vitritis** • **(+) culture**
Treatment	• Anterior chamber culture(?) • Consult with surgeon • Increase steroid • Close monitoring over first few days	• Anterior chamber culture • Immediate retina/ER referral • IV and intravitreal injections • Vitrectomy
Prognosis	• Mild-to-moderate should respond to steroid • Severe may require orals	50% will achieve 20/40 or better

Day 1 - Complications

- Retained lens material
  - Incomplete removal of the cataract
  - Considerations – Consult with cataract surgeon
    - Small lens fragments can be monitored very closely with topical corticosteroids
    - Larger fragments – refer back
      - Increased risk of complication further out from surgery

Day 1 -Complications





Week 1

- Examination
  - Visual Acuities
  - Refraction
    - 90% of refractions are stable
    - Accommodating lens consideration
  - Discontinue antibiotic

Week 1 - Complications

- Endophthalmitis
  - Typically 2-7 days status-post
    - Severe anterior and posterior chamber reaction
    - Severely reduced acuities
    - Pain
    - Conjunctival injection
    - EMERGENT – retinal specialist or hospital ophthalmology
      - IV antibiotics, intravitreal injections, guarded prognosis

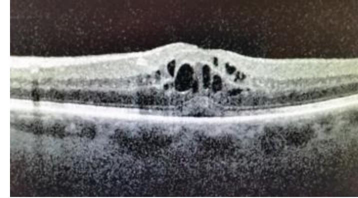
Month 1

- Examination
  - Visual Acuities
    - Reduced from prior visits – possible CME
  - Dilated examination
    - Pre-existing conditions: diabetes, prior RD, AMD
    - Compromised pre-operative views

Month 1 - Complications

- Irvine-Gass Syndrome
  - Cystoid Macular Edema
    - Incidence and Complications
      - OCT and VA
    - At risk: poor vascular health, poor macular health, pre-existing uveitis
    - Continue topical steroid and NSAID
    - Resolution may be slow
    - If non-responsive or worsening, consider subconjunctival, sub-Tenon's or intravitreal injection

Month 1 - Complications



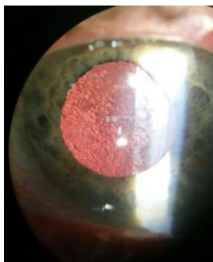
Month 1 - Complications

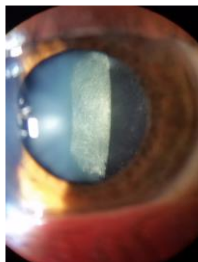
- Rebound uveitis
  - Approach like traditional uveitis: aggressive steroid dosing with slow taper
- Chronic corneal edema
  - Corneal decompensation
  - Treatment:
    - Non-CAI IOP lowering drops
    - Bandage lens
    - PKP or DSAEK
- Macular hole
    - Pre-existing early stage macular holes
    - Decrease in vitreous volume

Month 3+

- Posterior Capsular Opacification
  - Fibrosis of the posterior lens capsule
  - Glare complaints and/or reduced acuities
  - Nd:YAG laser capsulotomy
- Diabetic retinopathy and CSME
  - 20-40% more likely to experience worsening NPDR and PDR

Month 3+





Billing and Coding

- Concepts to remember:
  - Documentation of pre-surgical agreement to comanage and post-surgical transfer of patient
  - Who pays for comanagement?
  - Parallel billing
  - Reimbursement

Billing and Coding

- Parallel Coding
  - Same procedure code: 66982/66984
  - Diagnosis code
- Modifier 55 – Post-operative care
- Modifier RT/LT
- Modifier 79 – Unrelated surgery within global
  - 2nd eye only
- Date of transfer
  - Start is the day after transfer/day you assumed care
  - End date is 90 days from surgery
    - 13 weeks – 1 day/12 weeks + 6 days

Billing and Coding

17 I. Good, MD	17a 17b 12345678				
19 Care Assumed on 1/19/12					
21 366.16					
24a	24b	24d	24e	24f	24g
01/10/2012	22	66984-55RT	1	xxx.xx	1

- 17 – Surgeon's Name
- 17b – Surgeon's NPI
- 19 – Start Date
- 21 – Diagnosis
- 24a – Date of surgery
- 24d – Procedure Code + 55 + RT/LT + 79 (only if 2nd eye)
- 24g – # of Days for Medicare

On the Horizon

- Elimination of 10-day and 90-day global period
  - 2017 – 10-day global
  - 2018 – 90-day global
- Simplified post-op drop regimen
  - Intracameral injections
    - Compounded Tri-Moxi