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Conservative Management of Retained Lens Cortex in Anterior Vitreous

Successful Outcome with Topical Corticosteroid Therapy

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Introduction

Retained Lens Fragments

- Can occur during complicated cataract surgery
- Zonular weakness → higher risk
- May cause inflammation, CME, IOP elevation

Management Dilemma

Traditional approach:
- Pars plana vitrectomy (PPV)

Alternative for select cases:
- Conservative management?

Purpose

To describe successful conservative management of retained lens cortex displaced into the anterior vitreous during complicated cataract surgery in a patient with pseudoexfoliation syndrome.

Case Presentation

Patient

65-year-old male
Pseudoexfoliation syndrome
Preop BCVA: 0.1

Intraoperative Complication

During I/A stage:
• 3 clock-hour zonular dialysis (inferotemporal)

Surgical Events

1. Cortical fragment (~2 DD) prolapsed into anterior vitreous through zonular dehiscence
2. Complete cortical cleanup from capsular bag achieved
3. CTR successfully implanted
4. Single-piece IOL placed in the bag

Decision

Given:
• Small fragment size
• Anterior location

→ **Conservative management chosen**

Management & Results

Treatment Protocol

Prednisolone acetate 1%:
• Days 1-5: Hourly
• Then: 6×/day → taper over 6 weeks

IOP management:
• Transient ↑ to 22 mmHg
• Short-term topical antiglaucoma

Results Timeline

POD 1:
BCVA 0.8, mild corneal edema

Week 6:
Complete cortex resorption ✓

Month 3:
BCVA 1.0, clear vitreous ✓

3-Month Final Outcome

BCVA	IOP	Vitreous	ECD
1.0	**Normal**	**Clear**	**2300 → 2180**

Conclusions

1. Small retained cortical fragments in anterior vitreous can be managed conservatively
2. Intensive topical corticosteroid therapy promotes resorption
3. In carefully selected patients, conservative approach may obviate need for PPV
4. Patient selection is key: small fragment size + anterior location

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