

#### 10.4.4. Open Angle Glaucoma (IV): Secondary Open-Angle Glaucoma (II): Lens-Induced Glaucoma

##### Lens particle glaucoma

##### Phacolytic glaucoma

##### Phacoantigenic glaucoma

lens cortex particles obstruct the trabecular meshwork

cataract extraction

capsulotomy

ocular trauma

following

quantity of lens material released

degree of inflammation

ability of the trabecular meshwork to clear the lens material

functional status of the ciliary body

severity of IOP elevation depends on

± months or years later

within weeks of the initial surgery or trauma



Figure 4-12 (© 2020 American Academy of Ophthalmology)

free cortical material in the anterior chamber

clinical findings

elevated IOP

moderate anterior chamber reaction

microcystic corneal edema

posterior synechiae and peripheral anterior synechiae

medications to decrease aqueous formation

mydriatics to inhibit posterior synechiae formation

topical corticosteroids to reduce inflammation

If IOP cannot be controlled, surgical removal of the lens material is necessary

treatment

rare

following surgery or penetrating trauma

sensitization to lens protein

granulomatous inflammation

moderate anterior chamber reaction

KP on both the corneal endothelium and the anterior lens surface

differentiates from phacolytic glaucoma

low-grade vitritis

synechial formation

residual lens material in the anterior chamber

not common

glaucomatous optic neuropathy

corticosteroids and aqueous suppressants

If medical treatment is unsuccessful

removal of residual lens material

treatment

mature or hypermature cataract

leakage of lens protein through microscopic openings in the lens capsule

obstruction of TM by

lens proteins

phagocytizing macrophages

other inflammatory debris

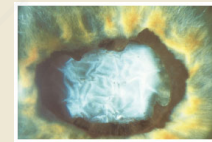


Figure 4-10 (© 2020 American Academy of Ophthalmology)

lens aging

increased concentration of high-molecular-weight lens protein

elderly patient with a history of poor vision

sudden onset of pain, conjunctival hyperemia, and worsening vision

markedly elevated IOP

microcystic corneal edema

cellular debris in the anterior chamber angle

clinical presentation

prominent cell and flare reaction

± pseudohypopyon

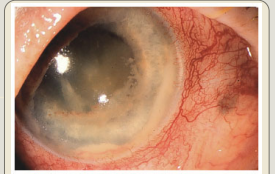


Figure 4-11 (© 2020 American Academy of Ophthalmology)

large white particles (clumps of lens protein) may also be seen in the anterior chamber

NO keratic precipitates (KP)

helps distinguish phacolytic glaucoma from phacoantigenic glaucoma

open anterior chamber angle

treatment

medications to control the IOP

definitive therapy requires cataract extraction