



Glaucoma Pictorial Essay

Phacolytic glaucoma at a glance

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Received : 14 December 2022

Accepted : 22 February 2023

Published : 14 March 2023

DOI

10.25259/LAJO_13_2022

Quick Response Code:



ABSTRACT

The objectives of this study were to report a case of phacolytic glaucoma with a lens-particle pseudohypopyon. This study was case report and literature review. A 66-year-old man with no comorbidities presented with gradual painless loss of vision in his left eye over 10 years. Ocular examination revealed visual acuity of 20/40 and light perception, for the right and left eye, respectively. The left eye slit-lamp examination disclosed extensive cornea guttae without edema or bullae, white fluffy material deposits on pupillary margin, poor mydriasis, hypermature cataract with intact lens capsule, and a mobile white cone-shaped deposit in the anterior chamber representing a lens-particle pseudohypopyon. Intraocular pressure was 32 mmHg. A B-scan ultrasonography was performed and showed increased anterior-posterior longitude due to posterior staphyloma and a large excavation of the optic nerve head. Corneal endothelial cell density was low, 880 cells/mm². At this point, phacolytic glaucoma due to a hypermature cataract was diagnosed. Hypermature cataracts are commonly seen in developing countries and phacolytic glaucoma is a complication of a long-standing cataract.

Keywords: Glaucoma, Lens-induced, Hypermature cataract, Phacolytic glaucoma

A 66-year-old man with no comorbidities presented with progressive painless vision loss in his left eye over 10 years. Examination revealed visual acuity of 20/40 and light perception for the right and left eye, respectively. The left eye slit-lamp examination disclosed extensive cornea guttae without edema or bullae, white fluffy material deposits on the pupillary margin, poor mydriasis, hypermature cataract with intact lens capsule, and a mobile white cone-shaped deposit in the anterior chamber representing a lens-particle pseudohypopyon [Figure 1]. Furthermore, high intraocular pressure was detected (32 mmHg). A B-scan ultrasonography was performed, increased axial length due to posterior staphyloma, and a large excavation of the optic nerve head was observed. Corneal endothelial cell density was decreased (880 cells/mm²). At this point, phacolytic glaucoma due to a hypermature cataract was diagnosed. The patient was scheduled for cataract surgery with extracapsular technique to minimize damage to the cornea.

Phacolytic glaucoma is characterized by a rise in intraocular pressure in the setting of an hypermature cataract with an open iridocorneal angle. It occurs secondary to denatured lens protein leakage through an intact lens capsule and secondary blockage of the trabecular meshwork with lens protein-laden macrophages. A rise in intraocular pressure generates a loss in optic nerve fibers and corneal endothelial cells. Hypermature cataracts are commonly

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Figure 1: Anterior segment photograph of the left eye showing an hypermature cataract with intact lens capsule and a cone-shaped lens particle pseudohypopyon.

seen in developing countries and phacolytic glaucoma is a complication of a long-standing cataract.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

How to cite this article: Gonzalez-Arocha CS, Gonzalez-Cortes JH, Treviño-Herrera AB. Phacolytic glaucoma at a glance. *Lat Am J Ophthalmol* 2023;6:5.