

Intraocular Lens Opacification After Uncomplicated Cataract Surgery

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Abstract

In this report, I presented a 52 year old female patient complaining of diminution of vision in her left eye 4 months ago phacoemulsification surgery with IOL implantation 4 years ago. Her surgical history was notable for uneventful phacoemulsification with posterior chamber intraocular lens implantation, slit lamp examination of anterior segment shows opacified lens fundus examination cannot be assessed, patient is diabetic and hypertensive, our decision was to do B- scan to exclude any posterior segment problem next step was Nd YAG laser capsulotomy and after failure of YAG we did IOL exchange.

Keywords: IOL Implantation; Intraocular Lens; Nd YAG Laser; IOL Opacification

Introduction

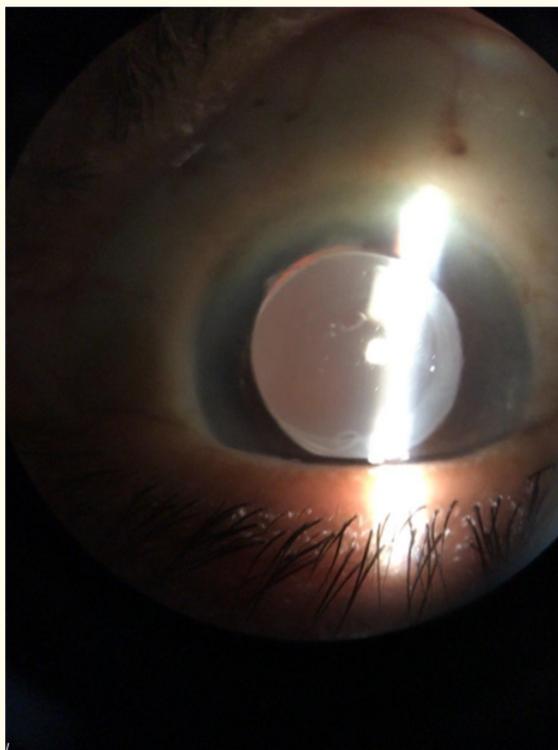
Intraocular lens (IOL) opacification is a rare and significant complication of IOL implantation surgery, and in most cases, these IOLs have to be explanted. IOL opacification May develop with many kinds of IOLs. However, this complication is not a common one, IOL opacification is a serious complication because it is one of the main causes of explanation due to diminution of vision [1-8].

Case Report

A 52 years old patient came to the clinic complaining of left eye diminution of vision (foggy vision) since 4 months she had cataract operation in left eye 4 years ago and right eye 3 years ago, the patient is known to be diabetic and hypertensive.

By examination

- UCVA of both eyes 0.2 corrected to 0.6 in Right eye and left eye not correct.
- By slit lamp examination: Clear cornea.
- Pharmacological dilated pupil.
- Whitish discoloration of IOL.
- Fundus examination can't be assessed.
- B scan was done and revealed normal study.
- Nd YAG laser capsule (was done with no improvement so we moved to second differential diagnosis).
- Anterior vitrectomy (after failure of YAG capsulotomy we did pars plana anterior vitrectomy with no clearance of the media, we cannot see the red reflex yet).
- IOL exchange was done.



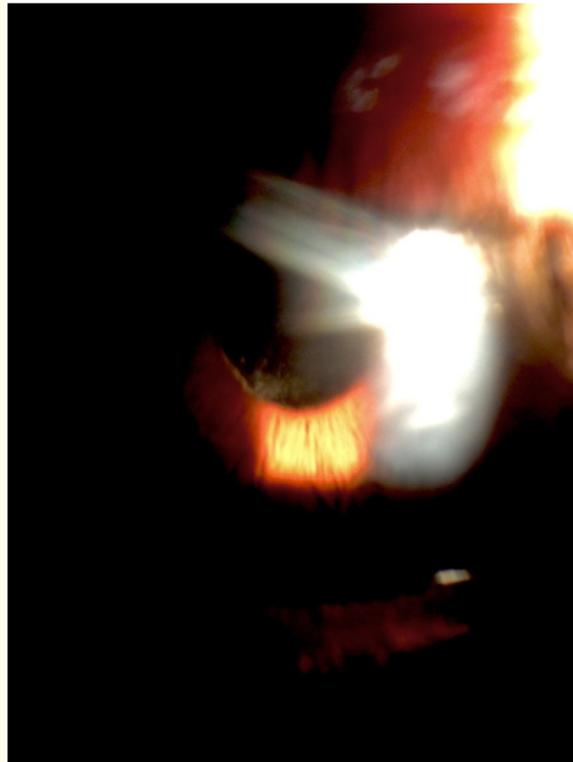


Figure 1: This a figure for slit lam examination for the patient after IOL exchange.

Discussion

According to many other case reports, opacification can occur in different ways according to the time period and the IOL materials. For example, opacification is usually caused by precipitation of deposits on the IOL surface, could be due to the type of saline or viscoelastic substance which was used. For example, silicone IOL opacification was found repeatedly after cataract surgery in a few days as a result of hydration and the interaction of hydrogel material with substances used during surgery. As a late complication, most reports showed that silicone and hydrophilic acrylic IOLs were found more than other types.

Laboratory tests show that precipitation of calcium and phosphate into and/or within the IOL causes the opacification of explanted hydrophilic acrylic IOLs. The cause of calcification has not been understood up till now and may be linked to the production processes, despite, other processes may be used in IOLs are fabricated from different materials, like ultimate inflow of water in hydrophobic IOL, the discoloration caused by dyes or medications, and progressive degradation of the biomaterial.

Conclusion

IOL opacification may be misdiagnosed, we can avoid misdiagnosing such a complication, we should put in our mind IOL opacification when a patient presents with diminished vision after cataract surgery, by Doing a careful, slit-lamp examination. by these measures we can differentiate between deposits present on the external surfaces of the intraocular lens, opacities within the lens or opacities at the level of the posterior capsule or the vitreous.

Declaration of Patient Consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

Conflicts of Interest

There are no conflicts of interest.

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