

Inflammatory deposits on the foldable intraocular lens

Amravi Shah, Chetan Rao, Krishna Kumar, Ronnie Jacob George, Parthopratin Dutta Majumder

Key words: Inflammatory giant cell deposits, IOL deposits, IOL histopathology

A 59-year-old female presented with visual acuity of 6/18, N8 in her left eye, 10 years after combined cataract and glaucoma surgery. Slit-lamp examination revealed a quiet eye with multiple deposits on the intraocular lens (IOL) which could not be removed by YAG laser or manual scraping [Fig. 1a]. Histopathological evaluation of explanted IOL revealed multiple histiocytes on the optic surface and multinucleated giant cells on the haptic surface [Fig. 1b-d]. Giant cells, visible on slit lamp as sharp, round, or oval spots with or without pigmentation, usually occur within 2 years after implantation.^[1]

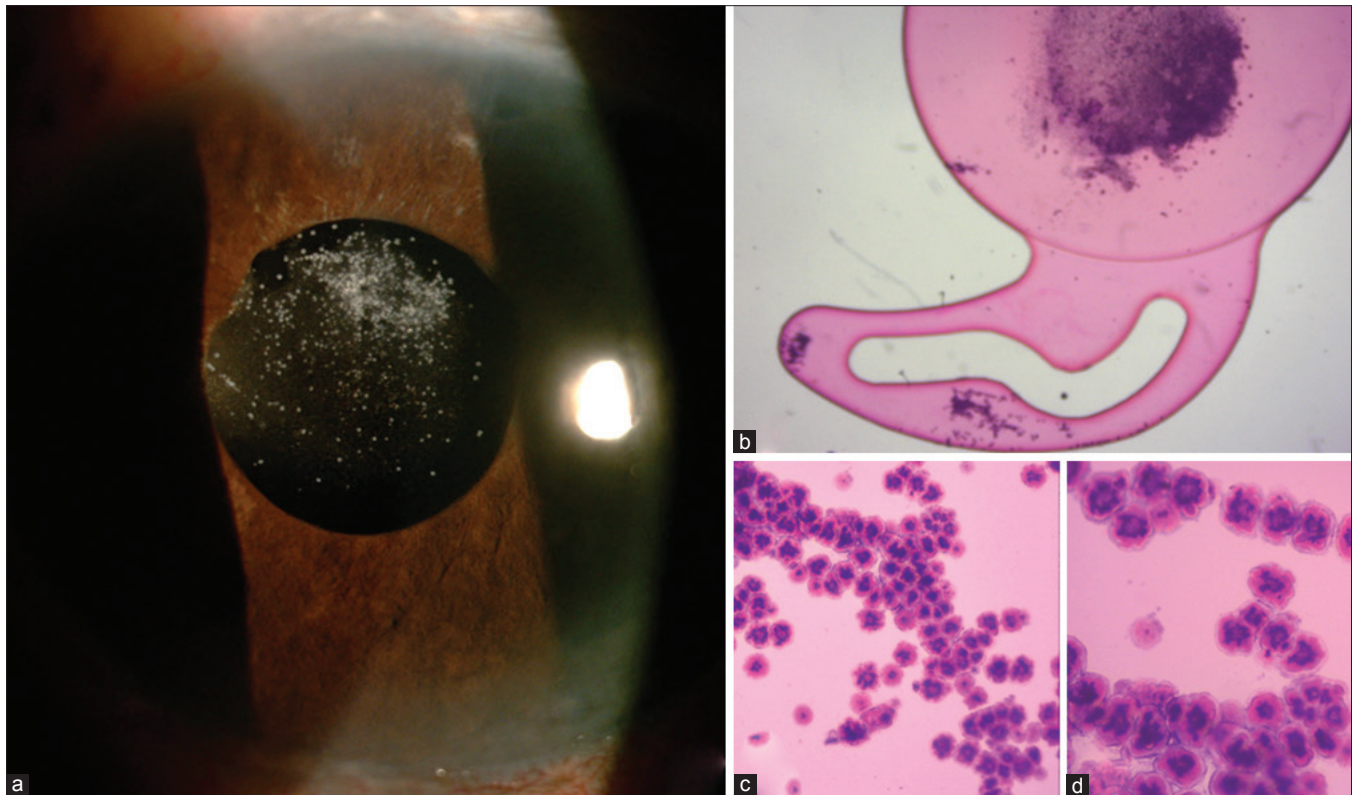


Figure 1: (a) Slit-lamp photograph showing sharp white round deposits within the IOL optic (b) Optic and haptic surface showing chronic granulomatous inflammation (Hydrophilic Acrylic IOL with plate loop haptics; H and E stain; original magnification 10x). (c and d) Optic surface showing numerous histiocytic cells and haptic showing numerous multinucleated giant cells; H and E stain; original magnification 400x and 500x

Access this article online	
Quick Response Code:	Website: www.ijo.in
	DOI: 10.4103/ijo.IJO_1359_19

Department of Uvea and Intraocular Inflammation, Medical and Vision Research Foundations, Sankara Nethralaya, Chennai, Tamil Nadu, India

Correspondence to: Dr. Parthopratin Dutta Majumder, Department of Uvea, Sankara Nethralaya, 18, College Road, Nungambakkam, Chennai - 600 006, Tamil Nadu, India. E-mail: drparthopratin@gmail.com

Received: 24-Jul-2019
Accepted: 28-Aug-2019

Revision: 21-Aug-2019
Published: 19-Dec-2019

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

Cite this article as: Shah A, Rao C, Kumar K, George RJ, Dutta Majumder P. Inflammatory deposits on the foldable intraocular lens. Indian J Ophthalmol 2020;68:190-1.

Discussion

The most conspicuous factor in the development of an inflammatory giant cell reaction, after combined cataract and glaucoma surgery, is IOL design whereby silicone plate IOLs show greater reaction compared with 3-piece acrylic IOLs.^[2] Increased intraoperative manipulation involved in combined surgery is responsible for these inflammatory deposits, hence the choice of IOL becomes extremely important in such cases. IOL removal is imperative when they become visually significant.

Declaration of patient consent

A written informed consent was taken from the patient. Ethics committee approval was obtained.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Wolter JR. Foreign body giant cells on intraocular lens implants. *Graefes Arch Clin Exp Ophthalmol Albrecht Von Graefes Arch Klin Exp Ophthalmol* 1982;219:103-11.
2. Samuelson TW, Chu YR, Krieger RA. Evaluation of giant-cell deposits on foldable intraocular lenses after combined cataract and glaucoma surgery. *J Cataract Refract Surg* 2000;26:817-23.