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Unusual Presentation of Extensive Visually Significant Pseudoexfoliative Deposits on an Intraocular Lens Implant in a Pseudophakic Eye: Insights and Implications [Letter]

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Dear editor

This current case report on "Unusual Presentation of Extensive Visually Significant Pseudoexfoliative Deposits on an Intraocular Lens Implant in a Pseudophakic Eye: Insights and Implications"¹ was read with great interest, and the authors are to be commended for their unique contribution to the existing body of knowledge regarding pseudoexfoliation syndrome (PEX). This case stands out as particularly fascinating and clinically important, shedding light on a rare manifestation of dense PEX deposits on an intraocular lens (IOL) without prior posterior capsulotomy or glaucoma. The histopathological findings, revealing amyloid-positive fibrillary deposits in a distinct stellate pattern, provide critical insights into PEX morphology and pathophysiology.¹ Additionally, the case underscores the value of interdisciplinary collaboration, highlighting the essential role of eye care professionals, such as optometrists, in identifying postoperative complications and ensuring timely management. By addressing the diagnostic and therapeutic challenges of PEX in pseudophakic patients, this case broadens our understanding of the condition and its implications for clinical practice.

In reviewing the case report, we greatly appreciated the detailed description and clinical insights provided. However, we noted a discrepancy in Figure 1A that described as an optical coherence tomography (OCT) image showing PEX material on the IOL. Based on the figure, it appears that this may have been a mislabeling, as no OCT image is actually presented. This observation naturally leads to a broader discussion on the indispensable role of imaging techniques, such as anterior segment OCT (AS-OCT), in elucidating the underlying causes of visual disturbances and guiding clinical decisions.

In cases of PEX, AS-OCT frequently proves invaluable by enabling differentiation between potential sources of opacity, such as deposits on the IOL, secondary membranes, or other causes. This imaging modality facilitates targeted interventions, including IOL membrane peeling, which can often avert the need for more invasive procedures like IOL exchange surgery. By allowing precise identification and management of visually significant deposits, AS-OCT plays a crucial role in optimizing patient outcomes while minimizing surgical interventions.^{2–4}

It is crucial to consider the role of Nd: YAG laser posterior capsulotomy before proceeding with IOL exchange in pseudophakic patients with unexplained visual decline. The case reported by Aleshawi et al¹ demonstrates how extensive PEX deposits on an IOL can mimic posterior capsule opacification or lens degradation, potentially leading to premature surgical intervention. Since the YAG laser is a minimally invasive procedure with low morbidity, it offers a valuable diagnostic and therapeutic option in such ambiguous cases, particularly when the exact cause of visual impairment is uncertain.⁵ Previous reports suggest that PEX visibility and distribution may even change post-capsulotomy due to altered aqueous dynamics.¹ Additional cases have shown that PEX deposits on IOLs can develop even without prior capsulotomy, underscoring the risk of misdiagnosis.⁶ Given that laser treatment does not preclude subsequent IOL

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exchange, employing it as a first-line step may avoid unnecessary surgery when there is little to lose and potential diagnostic insight to gain.

We sincerely appreciate the opportunity to contribute to this important topic and commend the authors for their thorough and well-documented work. We hope our comments will assist in enhancing clinical approaches to PEX management.

Disclosure

The authors have no conflicts of interest to declare for this communication.

References

- 1. Aleshawi A, Al Qudah MA, Alazmi H, et al. Unusual presentation of extensive visually significant pseudoexfoliative deposits on an intraocular lens implant in a pseudophakic eye: insights and implications. *Clin Optom.* 2025;17:127–131. doi:10.2147/OPTO.S517593
- Ang M, Baskaran M, Werkmeister RM, et al. Anterior segment optical coherence tomography. Prog Retin Eye Res. 2018;66:132–156. doi:10.1016/j. preteyeres.2018.04.002
- 3. Bille JF. High Resolution Imaging in Microscopy and Ophthalmology: New Frontiers in Biomedical Optics. Springer, 2019.
- 4. Pujari A, Sharma N. The emerging role of anterior segment optical coherence tomography in cataract surgery: current role and future perspectives. *Clin Ophthalmol.* 2021;15:389–401. doi:10.2147/OPTH.S286996
- 5. Karahan E, Er D, Kaynak S. An overview of Nd: YAG laser capsulotomy. Med Hypothesis Discov Innov Ophthalmol. 2014;3(2):45.
- Park K-A, Kee C. Pseudoexfoliative material on the IOL surface and development of glaucoma after cataract surgery in patients with pseudoexfoliation syndrome. J Cataract Refract Surg. 2007;33(10):1815–1818. doi:10.1016/j.jcrs.2007.05.045

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