The management of a dexamethasone implant migration to the anterior chamber of an eye with FILL SSF Carlevale lens "Use it or lose it"

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Purpose: To report a case of migration of a sustained-release dexamethasone implant (Ozurdex®) into the anterior chamber (AC) of an eye with a FILL SSF Carlevale lens. The complications, the management, and the long-term outcomes.

Case Presentation: A 65-year-old woman, previously operated for a dislocated intraocular lens (IOL) in her right eye with pars plana vitrectomy (PPV) and FILL SSF lens implantation, has suffered from refractory to topical treatment postoperative cystoid macular edema (CME).
A sustained-release dexamethasone implant (Ozurdex®) was injected, with the following resolution of the CME. After 6 months a second implant was injected due to CME recurrence (Image 1). 20 days after the injection, the patient complained of a sudden decrease in visual acuity (VA). Her VA was counting fingers (CF). At the slit lamp examination, a corneal edema and the presence of a dexamethasone implant on the AC was noted (Images 2a-b). On the OCT examination, the macula edema was resolved (Image 2c). After discussing with the patient, instead of relocating the implant to the posterior chamber (PC), the choice of complete removal was made at the following day.

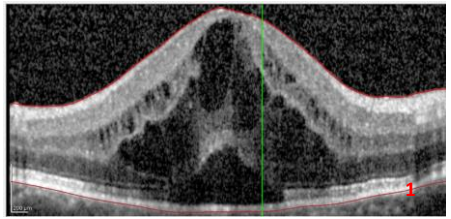
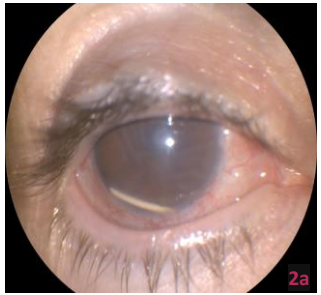
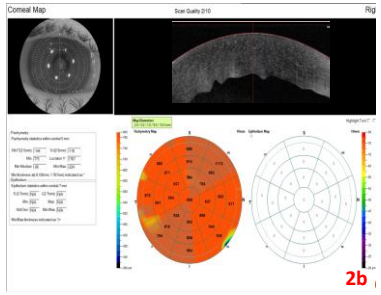


Image 1: Retina Oct OD: Relapsing Post-operative cystoid **macular edema** (CME.) VA: CF





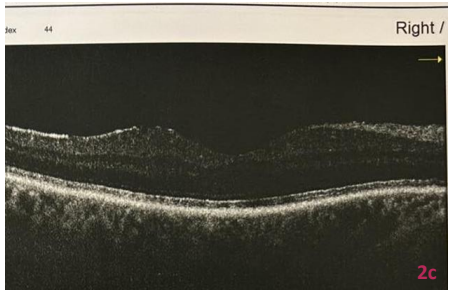


Image 2a: Photo of anterior chamber, depicting corneal edema and the presence of the dexamethasone implant in the anterior chamber.

Image 2b: Corneal map, **1 day before** the removal of the dexamethasone implant. Central Corneal Thickness(CCT): **870μm**

Image 2c: Oct scan, **1 day** before the removal of the implant, depicting complete **resolution** of the **macular edema**. Low signal due to corneal edema

Image 3: Removal of the **implant** from the anterior chamber with the **phaco probe**

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Results: The corneal edema gradually improved in the following days. After one month, the corneal thickness was within normal limits as confirmed by a corneal topography in both eyes (Images 4a-b). Despite the dexamethasone implant removal, no CME was present at the 4-month follow up and her VA was improved to 8/10 (Image 4c).

Conclusion: Anterior chamber migration is a possible complication of the dexamethasone implant injection, even in vitrectomized eyes with scleral fixated lens. Immediate removal or relocation of the implant to the PC is mandatory to avoid corneal complications. In some cases, the removal of the implant may not be accompanied by recurrence of CME.

References:

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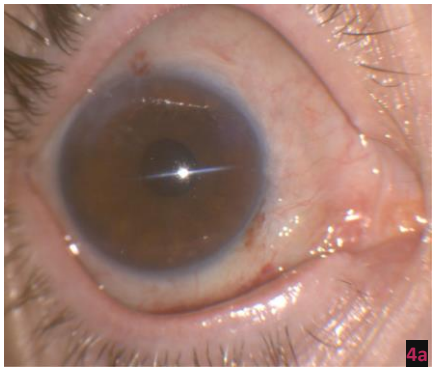

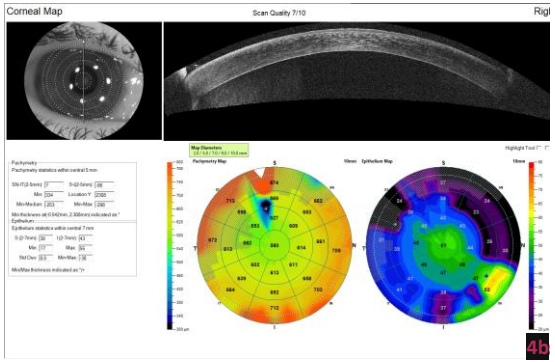

Image 4a: Photo of anterior chamber with complete resolution of corneal edema 25 days after the removal of the implant

Image 4b: Corneal map **25 days after** the removal of the dexamethasone implant**.** Corneal thickness was within normal limits. CCT: **580μm**

Image 4c: Retina Oct OD 4 months after the injection of the implant: Complete resolution of the macular edema despite the removal of the implant from the anterior chamber.

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