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Migration of a fluocinolone acetonide implant (Yutiq) to the anterior chamber and its nonurgent removal

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1. Case report

A 68-year-old woman with panuveitis presented with a fluocinolone acetonide insert (Yutiq, Eyepoint Pharmaceuticals Inc., Watertown, MA, USA) in the anterior chamber of the right eye six months after administration into the posterior segment. The implant was immobile in the anterior chamber and touching the endothelial surface of the cornea. Placement of the implant into the vitreous cavity had been uneventful, and she had previously received numerous dexamethasone implants in both eyes without anterior chamber migration. The patient had no symptoms, and on clinical examination, the cornea was clear at the site of implant contact (Fig. 1). Other stable corneal findings included pre-existing band keratopathy at the temporal and nasal portions of the cornea and pre-existing haze at the limbus that was present 360° in association with her chronic hypotony and peripheral iridocorneal contact. The patient had pseudophacodonesis and inferior subluxation of the lens-capsule complex. Corneal pachymetry was asymmetrical at 692 μm in the right eye and 581 μm in the left. The patient could not stay for treatment but returned four weeks later; at that time, she remained asymptomatic, and her cornea was clear, but device removal was recommended. At the slit lamp in the clinic and under topical anesthesia, a paracentesis incision was created at the temporal limbus. Viscoelastic agent was injected into the anterior chamber, and 23-gauge serrated forceps were used to grasp and withdraw the implant.

2. Discussion

With the development of solid injectable intravitreal implants, physicians and patients must be prepared for device migration into unexpected locations. At least 51 cases of anterior segment migration of the dexamethasone implant have been published,[1] and two cases of migration of the fluocinolone implant have also been reported.[2,3] Risk factors for intravitreal implant migration into the anterior chamber include aphakia, an open or defective lens capsule, or prior history of vitrectomy surgery.[4] We speculate that this patient's loose zonules allowed the fluocinolone acetonide implant to migrate to the anterior chamber.

This patient's experience may demonstrate that the fluocinolone implant is less toxic to the cornea than the dexamethasone implant. Severe corneal edema and decompensation secondary to dexamethasone implant migration is thought to be from endothelial injury due to chemical toxicity from components of the implant and/or mechanical trauma. It is possible that the 0.19 mg fluocinolone acetonide implant's differences in chemical makeup and physical properties and its lower steroid dosage cause less corneal toxicity. Thus, anterior chamber migration of the fluocinolone acetonide implant may not require emergent management.

3. Conclusion

A fluocinolone acetonide intravitreal insert can migrate to the anterior chamber and may be relatively well tolerated, allowing for nonurgent removal. Extraction of the device may be accomplished in the outpatient clinic setting.

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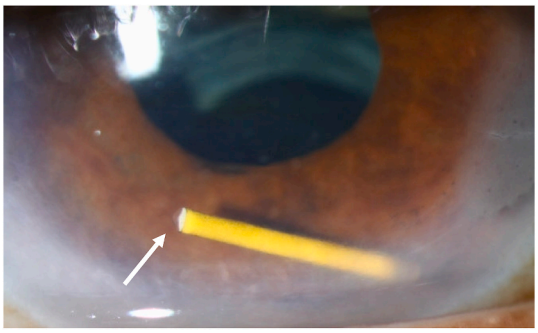

Fig. 1. Slit lamp photograph taken on the day of initial presentation demonstrates the fluocinolone intravitreal insert in the anterior chamber, with a clear cornea at the site of direct contact to the endothelial surface (arrow).

Authorship

All authors attest that they meet the current ICMJE criteria for authorship.

Declaration of competing interest

The authors have no disclosures to report.

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