Migrating Ozurdex Implants: Risk Factors and Management Strategies

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PURPOSE
To describe the risk factors for migration of a sustained dexamethasone implant (Ozurdex, Allergan) into the anterior chamber and surgical techniques to remove it.

METHODS
The medical records of four patients with spontaneous migration of an Ozurdex implant into the anterior chamber were retrospectively reviewed.

RESULTS
Each patient with anterior migration of an Ozurdex implant shared the risk factors of prior vitrectomy and absence of the posterior capsule. Two patients were aphakic, one had an anterior chamber intraocular lens and one had a scleral-fixed posterior chamber intraocular lens. In each case, the patient developed symptomatic corneal edema and removal of the implant was needed. The Ozurdex implant was removed successfully in all four cases. In two cases, the implant was externalized in its entirety. In the other two cases, the implant disintegrated upon grasping with a forceps and automated aspiration of the particles was required.

Case 1
A 49 yo AAF with history of uveitis, CME, and strabismus with scleral fixed PCIOL, underwent an intravitreal injection of Ozurdex. Migration occurred 17 days after injection and the implant was removed 2 days later. The removal procedure involved filling the anterior chamber with viscoelastic and removing the implant with a tying forceps through a limbal incision. No breakage or disintegration occurred. The corneal edema eventually resolved.

Case 2
A 65 WM with history of PPV/PPL and ACIOL developed CME secondary to a CRVO. After an uncomplicated injection of Ozurdex, the implant migrated into anterior chamber 14 days later with the development of corneal edema. In the operating room, forceps were attempted to remove the implant but it disintegrated into numerous pieces. A vitreous cutter was then used to aspirate the remaining pieces of the implant. The visual acuity improved but the corneal edema did not resolve.

Case 3
A 63 year old Hispanic female with history of PPV and PPL for non-clearing vitreous hemorrhage secondary to CRVO presented with persistent CME. Patient underwent an intravitreal injection of Ozurdex. She presented 19 days later with implant migration into AC associated with localized corneal edema. Patient was taken to the operating room 3 days later and the implant was removed using the IA hand piece. There were no complications during implant removal. The corneal edema improved one week post-op but later recurred.

Case 4
A 65 year old aphakic white male with a history of a PPV developed CME secondary to a CRVO. After an uncomplicated injection of Ozurdex, the implant migrated anteriorly seven days later. The patient developed corneal edema. In the operating room, the implant was attempted to be removed with a forceps but it moved into the posterior chamber. A three port PPV was set up and, an intraporal forceps was used to remove the implant through a sclerotomy. The implant remained in one piece. The corneal edema resolved.

Table 1: Patient Data

<table>
<thead>
<tr>
<th>Patient Age</th>
<th>Sex</th>
<th>Diagnosis</th>
<th>Prior PPV</th>
<th>Lens Capsule</th>
<th>Lens Status</th>
<th>Prior Ozurdex</th>
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<td>BRVO/CME</td>
<td>Yes</td>
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* One prior Ozurdex injection after PPV/IOL exchange for dislocated PCIOL

CONCLUSIONS
Absence of the posterior lens capsule and prior vitrectomy were two common factors in all patients in this series with anterior migration of an Ozurdex implant. If such migration occurs, implant removal is necessary to reduce the risk of chronic corneal edema. The implant may be removed in its entirety with forceps or with the assistance of automated aspiration.

References
3. Ozurdex Prescribing Information. Revised 02/2012. Allergan, Inc.

Financial Disclosures: None
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