Pupilloplasty to prevent dexamethasone intravitreal implant migration to anterior chamber

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DESCRIPTION

We present a case of a 84-year-old man, treated with dexamethasone intravitreal implant (Ozurdex®) for Irvine-Gass syndrome after complicated cataract surgery, with subsequent vitrectomy and retro-pupillary positioning of iris-fixated intraocular lens. Four weeks after the implantation, the patient presented with the implant in the anterior chamber. To prevent corneal oedema, the implant was removed the day after. After evaluating the anterior

Figure 1 (A) Anterior segment photography after removal of dexamethasone intravitreal implant from the anterior chamber. Note the adherence of the superior part of the pupillary border of the iris to the corneal endothelium at the level of previous corneal incision. The communication between the posterior and the anterior chamber is visible between the iris and the retropupillary iris-fixated intraocular lens. (B) Anterior segment photography after pupilloplasty.

Learning points

- ▶ Patients who have dexamethasone intravitreal implant, especially those with ruptured posterior capsule and prior vitrectomy, should be instructed to seek medical attention if they notice anterior chamber migration of the implant.
- ▶ Extraction of the implant from the anterior chamber should be done promptly to avoid further complications.
- ▶ This exploratory investigation suggests that surgical management of the communication between the posterior and the anterior segment may be a good option to prevent future migration of intravitreal implants.

segment, the communication between the vitreal cavity and the anterior chamber, through which the implant has migrated, was found (figure 1A). The cystoid macular oedema (CME) reappeared (figure 2A), so, the patient was submitted to pupilloplasty and implantation of dexamethasone intravitreal implant in the same procedure (figure 1B). Two months after the implantation, the CME has significantly improved (figure 2B) and there was no new migration of the implant.

Figure 2 (A) Macular optic coherence tomography after removal of dexamethasone intravitreal implant from the anterior chamber. Note the cystoid macular oedema (CME). (B) Macular optic coherence tomography after pupilloplasty and implantation of new dexamethasone intravitreal implant. There is almost complete resolution of CME.

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Migration of dexamethasone implant to the anterior chamber is more frequent in patients with prior vitrectomy and ruptured posterior capsule,¹ which was the case. Urgent extraction or repositioning of the implant is mandatory to prevent corneal oedema.² To our knowledge, this is the first reported case of management of this complication by performing pupilloplasty to prevent migration of a new implant.

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