

Figure 1 (a and b) Colour fundus photographs showing severely swollen optic discs with partial obscuration of the retinal vasculature. (c) Colour fundus photograph of the inferior mid-periphery showing dense cellular vitreous infiltrate. (d) Spectral domain OCT image through left optic nerve showing gross swelling of the optic nerve head and cellular infiltrate in the retro-hyaloid space and vitreous cortex. (e) Haematoxylin and Eosin stain (H&E) of the pars plana vitrectomy sample, showing numerous lymphoid blasts ($\times 400$). Inset figure (top right) is immunohistochemistry staining showing nuclear positivity of the blast cells with terminal deoxynucleotidyl transferase (TdT), confirming it to be a lymphoblastic leukaemia ($\times 400$). (f) Immunohistochemistry showing cytoplasmic positivity for the pan-T-cell marker CD3 ($\times 400$).

interface. Both optic discs were swollen with diffuse thickening of the adjacent neuro-retina (Figures 1a–c), confirmed by B-scan and OCT (Figure 1d). An MRI scan of head and orbits was unremarkable and a lumbar puncture showed no CSF blast cells. The appearances were consistent with leukaemic infiltration of the vitreous and retina, and the patient underwent a pars plana vitrectomy, with cytological assessment of the vitreous confirming vitreous involvement by T-ALL (Figures 1e and f). A repeat lumbar puncture then demonstrated an infiltrate of lymphoid blasts. He was treated with radiotherapy (24 Gy) to the orbits and an allogeneic stem cell transplant, with vision improvement to 6/12 in both eyes and CSF blast clearance.

Comment

This is the first time T-ALL has been recorded in the vitreous of an adult eye and diagnosed by vitrectomy cytology. The only previous report of T-ALL was in a child presenting with bilateral bullous retinal detachment, diagnosed by subretinal fluid cytology.²

An adult case series of acute lymphoblastic leukaemia (B and T types) has shown a central nervous system relapse rate of 7% in those achieving remission with a median survival of only 6 months.³

The confirmation of relapsed leukaemia in this case dramatically altered the management and prognosis for this patient. Rather than proceeding to maintenance chemotherapy the patient was treated with further induction and consolidation chemotherapy, radiotherapy to the orbits, and ultimately allogeneic stem cell transplantation. Finally, it illustrates the importance of obtaining a proper pars plana vitrectomy specimen with sufficient cellular material permitting an accurate and timely diagnosis of vitreo-retinal haematological malignancy.⁴

Conflict of interest

The authors declare no conflict of interest.

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Sir, Spontaneous relocation of a trapped retrolenticular slow-release dexamethasone implant (Ozurdex) in a silicone oil-filled eye of a pseudophakic patient

We read with interest the recently published article by Wai Ch'ng *et al* entitled 'Anterior vitreous displacement of the intravitreal dexamethasone implant (Ozurdex)¹ and wish to share our similar experience in a pseudophakic patient in whom the eye was filled with silicone oil.

Case report

A pseudophakic, 53-year-old Caucasian female required a three-port pars plana vitrectomy with silicone oil tamponade for a recurrent retinal detachment complicated with proliferative vitreoretinopathy. She was a participant in a prospective randomised controlled clinical trial (EudraCT No: 2011-004498-96) and

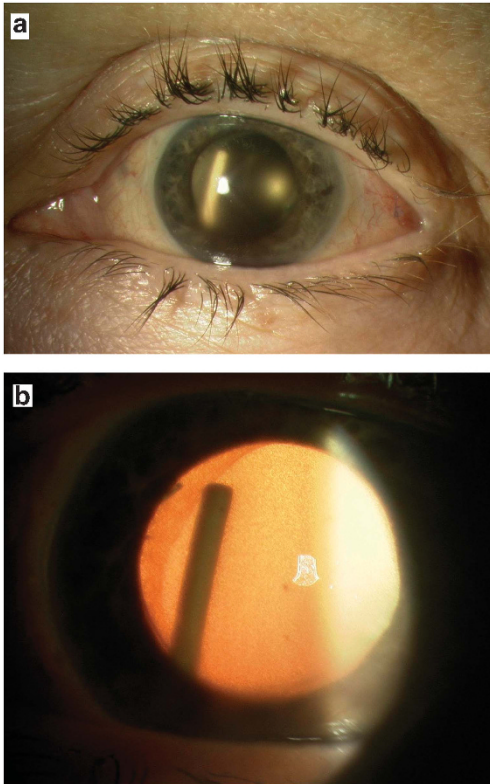


Figure 1 Day 10 post retinal detachment repair; (a) sustained-release dexamethasone implant (Ozurdex, Allergan Inc.) trapped posterior to PCIOL/bag complex and anterior to oil bubble. (b) Retro-illuminated slit-lamp image. Patient noted a 'white line in pupil for 5 days'. Spontaneous dislocation of Ozurdex to vitreous base occurred 1 week later.

received the study treatment, the slow-release dexamethasone implant (Ozurdex, Allergan Inc., Irvine, CA, USA) at the end of the procedure. This was injected through a superior sclerostomy into the oil-filled eye before port closure as per study protocol.²

At the first-day postoperative visit, slit lamp examination revealed the steroid implant trapped behind the posterior chamber intraocular lens/bag complex and anterior to the silicone oil bubble. The implant position was unchanged at a routine 10-day postoperative visit (Figure 1), at which point the patient had described noticing a vertical line in her pupil for 5 days. The implant was confirmed to have spontaneously dislocated inferiorly to the vitreous base at 1 month post injection, after the patient had reported its disappearance from the pupillary axis 10 days earlier. No adverse effect was noted. The patient had a routine removal of oil procedure 4 months postoperatively and was subsequently discharged from the vitreoretinal service with an attached retina at 12 months.

Comment

The slow-release dexamethasone implant (Ozurdex) is indicated for the treatment of adult patients with macular oedema following retinal vein occlusion, and for

posterior non-infectious uveitis.^{3,4} It has been used off-label to treat macular oedema in vitrectomised eyes of diabetics⁵ and in the oil-filled eye of a patient with ankylosing spondylitis.⁶ Its future use is expected to expand and its behaviour in different vitreous cavity environments remains under assessment.

Our case, and that reported by Wai Ch'ng *et al*, both highlight a potentially alarming, yet harmless postoperative appearance in eyes treated with a dexamethasone implant. Clearly, the mechanism suggested in the latter (retention within the anterior hyaloid fossa) could not explain the implant position in our vitrectomised oil-filled eye. It is more likely that a combination of the oil buoyancy force and a possible weak adhesion between the implant surface and posterior lens capsule resulted in its transient anomalous position.

Irrespective of the differing proposed mechanisms, both cases may serve to reassure clinicians that a retrolenticular trapped dexamethasone implant in the early post-injection period appears to be an innocuous finding.

Conflict of interest

The authors declare no conflict of interest.

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