

Differentiating Between a Silicone Oil Bubble and a Dislocated Intraocular Lens

Kate E. Shipman and C.K. Patel

ABSTRACT

This article aims to demonstrate how a silicone oil bubble can be mistaken for a dislocated intraocular lens. An 80-year-old gentleman was referred by his optometrist with the diagnosis of dislocated IOL in a pseudophakic eye. Eye examination revealed a silicone oil bubble from previous retinal-detachment surgery and that the lens was in-situ. In conclusion, a history of retinal detachment surgery should alert one that an oil bubble can be misinterpreted as a dislocated IOL.

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KEY WORDS: silicone oil; intraocular lens and dislocation.

RESUMEN

Este artículo se propone demostrar que una burbuja de aceite de silicona se puede confundir con una lente intraocular (LIO) desplazada. Un paciente varón de 80 años vino derivado por el optometrista; el cual le había diagnosticado "LIO desplazada" en un ojo pseudofáquico. La exploración ocular reveló la presencia de una burbuja de aceite de silicona, proveniente de una intervención anterior de desprendimiento de retina; también confirmó que la LIO estaba correctamente colocada. En conclusión, los antecedentes de cirugía de desprendimiento de retina deberían poner sobre aviso al personal sanitario, puesto que una burbuja de aceite de silicona se puede interpretar erróneamente como una LIO desplazada.

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PALABRAS CLAVE: aceite de silicona; lente intraocular desplazada.

INTRODUCTION

Silicone oil is used in ophthalmic surgery to reattach the retina. Unlike air and gas it does not absorb by the surrounding tissue, requiring its removal to prevent complications such as cataract, keratopathy and glaucoma. The optimal period for removal is still subject to debate and should be decided on a case-by-case basis, but it is currently thought to be between 3 and 6 months if the retina is stable.¹

Late dislocation of the intraocular lens (IOL) following cataract surgery occurs in 0.2-3% of the cases.² Risk factors for this complication include pseudoexfoliation, uveitis, trauma, vitrectomy and increased axial length.²

From the Oxford Eye Hospital, John Radcliffe Hospital, Headley Way, Headington Oxford. (United Kingdom).

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Corresponding author: Kate E. Shipman, 24 Kimbolton Road, Bedford MK40 2NR, Headington Oxford. (United Kingdom)
e-mail: kate.shipman@doctors.net.uk

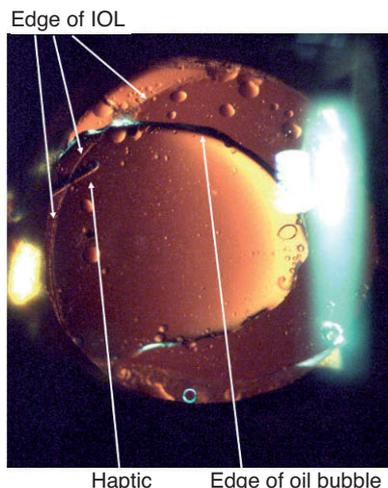


FIGURE 1
Colour photograph of the anterior chamber of the eye showing the intra-ocular lens and revealing the presence of a silicone oil bubble.

CASE REPORT

An 80-year-old gentleman was referred in by his optometrist with a 'slipped lens' in his right eye, which had previously undergone a phacoemulsification with implantation of an acrylic IOL followed, 6 months later, by retinal detachment repair using 1000-centistoke silicone oil. The silicone oil was subsequently removed and the patient discharged with stable visual acuity (VA) of 6/18 on the right eye and 6/9 on the left one.

On examination his VA was unchanged, but a silicone oil bubble adherent to the posterior chamber of the IOL was found (*Figure 1*). Following a full discussion of the risks and benefits of removing the oil bubble the patient opted for a conservative treatment.

DISCUSSION

Silicone oil is a widely used material for retinal detachment surgery and its adherence to IOLs is a well recognised phenomenon.³ Adherence is more likely if the IOL is made of silicone, which is avoided as biomaterial in patients at risk of retinal detachment. Retained silicone oil can emulsify causing floaters, secondary glaucoma and band keratopathy. Therefore, when examining a patient whose appearance suggests a dislocated IOL, it is worth taking a look at their past ocular history. If there is a history of retinal detachment repair, it is worth to include the possibility of a silicone oil bubble in the differential diagnosis.

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