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# Spontaneous dislocation of an Artisan phakic IOL causing corneal decompensation requiring an endothelial graft

We present a case of spontaneous dislocation of a phakic intraocular iris claw (Artisan) lens that resulted in a bullous keratopathy requiring an endothelial graft.

#### Case report

In 2002, a 26-year-old Brazilian man had bilateral Ophtec Artisan lenses (model 204,  $6 \text{ mm} \times 8.5 \text{ mm}$ ) inserted for



**Figure 1** (a) Right bullous keratopathy with corneal vascularisation. (b) Left Artisan lens *in situ* showing advanced iris atrophy nasally and minimal iris enclavation temporally. (c) Right cornea 6 months post endothelial transplant. the correction of high myopia. Four years later, he noticed sudden blurring of vision in his right eye, but was pain free and did not seek medical advice for 4 months. When he eventually saw his ophthalmologist, he was told that his lens had dislocated, and it was promptly removed. There was no history of trauma. Nine months later, after moving to the United Kingdom, he presented to the eye unit with a 1-month history of a red painful right eye with reduced vision. His vision was counting fingers right and 6/9 left unaided. He had a right bullous keratopathy (Figure 1a) and a left decentred Artisan lens with atrophic iris at the points of enclavation (Figure 1b, inset). The endothelial cell count in the left eye was 3042 cells/mm<sup>2</sup>.

He underwent right endothelial graft surgery. A 9-mm disc of posterior lamellar was blunt dissected, folded in a '60/40 taco', partially stained with vision blue, and inserted through a 5-mm scleral tunnel. The patient's own endothelium was not removed. A bubble of air was used to attach the donor lenticule to the endothelium at high pressure for 10 min.

At the last follow-up, 8 months postoperatively, vision in the right eye was 6/9 with a contact lens. Refraction was  $-12.00/-4.00 \times 105$ . The cornea and graft were clear (Figure 1c), and endothelial cell density was 1353 cells/mm<sup>2</sup>.

### Comment

Phakic Iris claw lenses were first introduced in 1986. They have been shown to be safe, stable, and efficacious in large multicentre studies.<sup>1</sup> Dislocation is a rare event and is often the result of trauma.<sup>2,3</sup> To our knowledge, this is the first report of a spontaneous dislocation of such a lens necessitating a corneal graft. There is little doubt that the late presentation of this patient to ophthalmologists was a significant factor in the degree of endothelial injury sustained. Examination of the contralateral eye in this patient shows atrophic anterior iris enclaved between the haptics. Surgeons should be aware of this potential devastating complication and should ensure good enclavation at the time of surgery.

### **Conflict of interest**

The authors declare no conflict of interest.

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