

during implantation has been reported; most of them do not affect visual outcome but may need explantation.<sup>2</sup> We report cracking of Phacoflex-II during insertion, using hydroxypropylmethyl cellulose (HPMC) with Unfolder™ system.<sup>4</sup>

A 56-year-old male presented with bilateral immature senile cataract with best corrected visual acuity (BCVA) of 20/80 in right eye and 20/40 in left eye. Detailed evaluation was unremarkable. Phacoemulsification was performed in the right eye.

Phacoflex-II was loaded into Unfolder™ using HPMC according to the manufacturer's instructions. Leading haptic was implanted successfully, while crack was noted at the trailing haptic-optic junction. The IOL optic had opened and it was impossible to withdraw. In spite of the crack, the IOL was well centered in the bag [Fig. 1]. On the first post surgical day, the patient had BCVA of 20/20. Crack measured approx. 2.4 mm and was not in the visual axis.

After six weeks, the IOL remained stable and well centered, without compromising BCVA.

There are reports<sup>1-3</sup> of IOL damage during implantation. Among silicone IOLs this complication has only been reported once with Clariflex but has never been reported with Phacoflex-II.

We have been using HPMC for insertion of Phacoflex-II using Unfolder™ for the past three years without any damage to the IOL. Though manufacturers instruct to avoid use of Healon™ with Unfolder™, its use without any lens damage has been reported.<sup>5</sup>

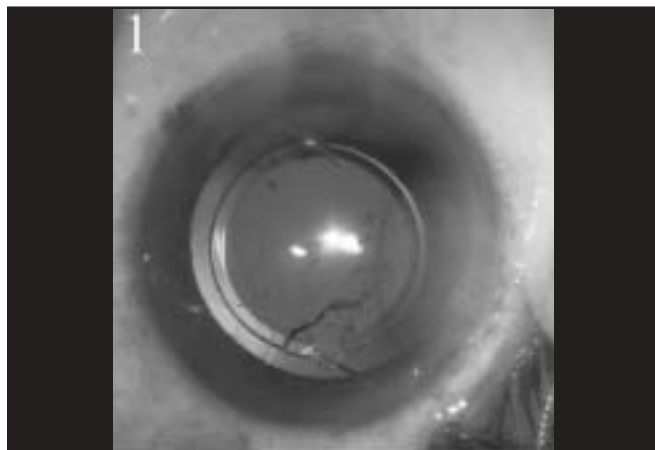
We used HPMC for cost constraint. This was the first complication of IOL damage.

In our case, proper technique for injection was followed, with use of HPMC. Hydroxypropylmethyl cellulose has lower pseudo-plasticity<sup>6</sup> than other viscoelastics, hence it is more difficult to begin and maintain injection through the cannula.<sup>6</sup> With HPMC, the force required to dislodge optic and haptic from the cartridge at initiation of injection is higher. This may lead to movement of optic followed by movement of trailing haptic after a time lag, due to inherent design of the injector. These factors could induce stress at the optic-haptic-junction leading to the crack.

## Intraoperative cracking of the AMO Phacoflex-II Silicone (SI-40NB) intraocular lens while implanting with the Unfolder™ silver series system using hydroxypropylmethylcellulose

Dear Editor,

Silicone and acrylic intraocular lenses (IOLs) are commonly used after phacoemulsification. Damage to acrylic<sup>1,2</sup> and Clariflex<sup>3</sup> IOLs



**Figure 1:** Intraoperative photograph showing cracked Phacoflex-II IOL in the capsular bag

These small peripheral cracks have no ill-effects on the visual outcome and stability of the IOL in the short term. If HPMC is used, a standby IOL should be ready at the time of implantation.

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