Author's reply

Dear Editor,

I thank Mr. Kongsap[1] for the interest in my article.[2] All techniques based on the Akahoshi prechop [3,4] will of necessity bear some resemblance to each other. If the Akahoshi prechop technique as described by Akahoshi is applied to small-incision cataract surgery it does not really count as a modification, just a new application for the same technique. This is probably the situation with Wiriyaluppa's technique (which I have not been aware of before), but which he describes in his letter to the editor[1] as having "used the Akahoshi chopper forceps to divide the nucleus within the capsular bag." However, my technique would probably qualify as a modification as the prechop is not carried out in the bag, and, the prechopper is not inserted in the anterior aspect of the nucleus.

Instead the lens is first prolapsed into the anterior chamber at least partially, and the prechopper then introduced into the posterior aspect of the lens and the lens then prechopped from behind forwards. This virtually eliminates any risk of zonular dialysis due to excessive pressure on the capsular bag, however, it introduces the risk of the nucleus rubbing the endothelium. That is why a dialer is always required anteriorly for counterpressure (similar to the sustainer of Akahoshi) to keep the nucleus from rubbing against the endothelium. However, the nucleus sustainer as described by Akahoshi, does not press the nucleus down away from the cornea, but instead is used to support the equator of the lens while prechopping from front backwards, in the capsular bag, in cases with weak zonules or very hard nuclei. A video of the Bhatti modification of the Akahoshi technique can be viewed at http://bhattieye.com/videos/nucsplitbhatti-1.wmv

The purpose of the article was really to demonstrate the technique, which I have been performing since a little after I saw Akahoshi's technique when he visited India in the early 1990s, and illustrate that from the astigmatism point of view, it is complementary to phacoemulsification, and not really competitive with it. The purpose was not really to list all the complications associated with this technique, which by and large are similar to small-incision cataract surgery or phacoemulsification, with the singular exception that nucleus drop has never occurred. The most frequent complication noted is occasional striate keratitis, near the temporal or nasal corneal tunnel, as the case may be. Being right-handed, I usually sit at the head end and make a temporal tunnel for the right eye and a nasal tunnel for the left eye. This keratitis is always self-limiting and clears in a maximum of three to four days.

Wiriyaluppa's mention of a technique using a 23-G needle to prechop the nucleus is analogous to the classical phako chop, using a phako probe, and I have in the past tried out a similar manual technique using two dialers, but it did not work well in my hands at least. However, I must add that I developed my modification of Akahoshi's technique also because I could not master sufficiently the classical Akahoshi prechop.

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References

1. Kongsap P. Visual outcome and complications of cataract surgery using prechop manual phacofragmentation. Indian J Ophthalmol 2011;59:409.
2. Bhatti SS. Description of surgical technique: The Bhatti modification for small-incision cataract surgery of the Akahoshi prechop technique. Indian J Ophthalmol 2009;57:31-3.
3. Akahoshi T. The Karate Prechop technique. Cataract Refract Surg Today 2002;2:63-4.
4. Akahoshi T. Phaco prechop: Manual nucleofracture prior to phacoemulsification. Op Tech Cataract Ref Surg 1998;1:69-91.

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