



Complementing the Blended Vision Strategy With the Acunex Vario

By Detlev R.H. Breyer, MD

The concepts of mini-monovision and blended vision are not new. In fact, they were created as a way for surgeons to sidestep the visual compromises associated with the use of monofocal IOLs, helping patients to achieve an acceptable level of vision at all distances. I used a blended vision strategy for many years with excellent results; however, I recently began implanting a varifocal EDOF IOL, the Acunex Vario, with even better results. This lens provides patients with the vision they have always wanted and that I could not provide with blended vision.

With the Acunex Vario, a lens that I believe represents the new standard of care for routine cataract treatment, patients can experience the benefits of a varifocal EDOF IOL, providing an extended range of vision and reducing the unwanted visual phenomena associated with multifocal lenses, including halos, glare, and dysphotopsia.

MONOVISION VERSUS BLENDED VISION

Studies have shown that only between 59% to 67% of patients tolerate monovision, compared to 97% who tolerate blended vision.¹⁻³ In a classic monovision strategy, the dominant eye is targeted for emmetropia and the nondominant eye for up to -3.00 D. This strategy creates a large blur zone in intermediate vision and does nothing to increase the depth of field in the distance zone in one eye and the near zone in the other eye. Alternatively, in a blended vision strategy, the dominant eye is still targeted for emmetropia, but the nondominant eye is targeted for -1.50 D. This creates a blended zone of vision in the intermediate range (Figure 14).

In my preferred blended vision strategy, the Düsseldorf miLens strategy, we use an IOL with a low-add varifocal optic in one eye and an IOL with a higher add in the other eye. With the low-add IOL, reading small print is difficult. We compensate for this either with another low-add IOL targeted for slight myopia or a higher-add optic, which is ideal for reading small print, in the other eye.

With this strategy, what we have found is that you can create a very smooth, constant, and better defocus curve by combining low- and high-add IOL technologies. To date, our enhancement rate is low.

But the blended vision strategy using a high-add optic does also have several disadvantages, including:

- Poor mesopic vision and photopic phenomena in one eye if implanting a diffractive higher-add IOL; and
- One to 3 months of neural adaptation.

BETTER VISION WITH THE ACUNEX VARIO

As an alternative to blended vision, I recently started using the Acunex Vario. The visual dynamics of the Acunex family

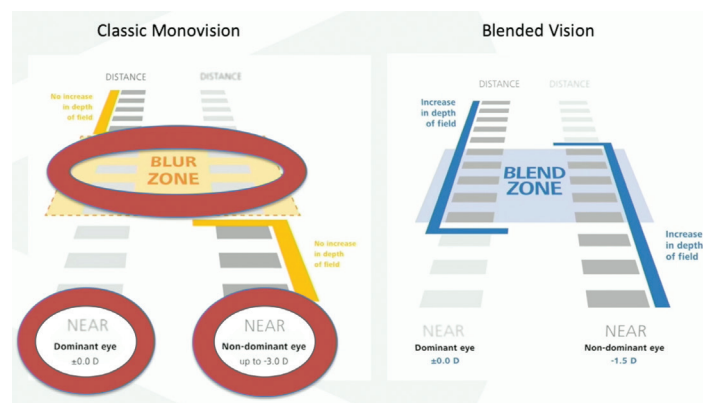


Figure 14. Visual dominance with a monofocal IOL and a blended vision strategy.

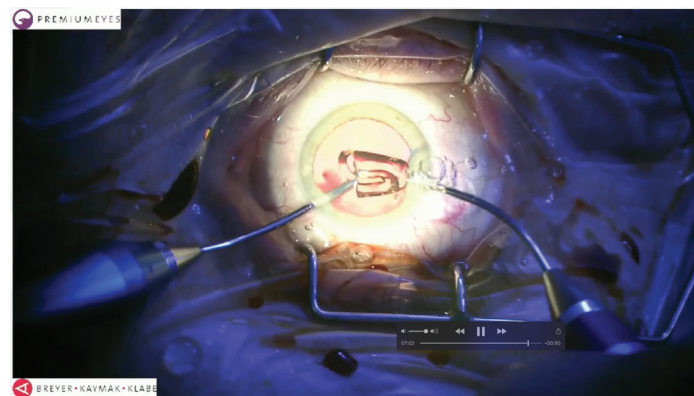


Figure 15. The Acunex Vario IOL unfolds smoothly in the capsular bag.

of lenses is very different from other refractive progressive EDOF and multifocal IOLs, and the lens produces excellent visual quality.

Incorporating this low-add IOL into our armamentarium allows me to provide an ideal solution to patients who especially desire intermediate vision. This lens also reduces the presence of photopic phenomena including halos and glare, and it maintains a contrast sensitivity that is better compared to other EDOF and multifocal IOLs.

I believe that the Acunex Vario allows us to have the best chance for happy patients after surgery. And from the surgeon's perspective, I especially like the segmental optic design because it's not as pupil-dependent as other rotational symmetric designs, even if it rotates postoperatively. It is also easy to handle and inject into the capsular bag, and the lens unfolds in a controlled manner (Figure 15). I can use a 2.2-mm incision, which I prefer.



CONCLUSION

Customizing treatment strategies for our cataract surgery patients is integral to the success of our surgeries. Over time, I have found a variety of IOLs that help me to achieve these custom results, and today the Acunex Vario plays an important part in the success of my surgery. ■

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