## Increased Patient Perception, Neural Adaptation Achieved With the AT LISA tri 839MP

With spectacle independence a likely outcome, most patients are happy after surgery.

BY ELISABETH FRIELING-REUSS, MD

ecause today's surgeons have a wide selection of IOLs to choose from, patients are able more often than previously to achieve optimal visual quality after cataract surgery. Additionally, because each patient's expectations and demands are unique, the IOL strategy suggested by the surgeon may not always be the same in each case.

Recently, however, I now suggest the AT LISA tri 839MP (Carl Zeiss Meditec) in an increasing number of my patients. Specifically, it is attractive to younger patients, including those who lead active lifestyles and those who have high visual demands. I am finding that the AT LISA tri IOL is a good option for this population because of its asymmetric light distribution strategy, which divides light between three foci—50% for far, 20% for intermediate, and 30% for near—to provide more satisfying and predictable visual outcomes for patients. The global light transmittance with the AT LISA tri is 85.7% (Figure 1). Below I recount my experience thus far with this new trifocal lens.

## PATIENT SATISFACTION

Background. For the past 6 years, I have been implanting the AT LISA 809MP bifocal IOL, which distributes 65% of light for distance focus and 35% for near focus. This lens helped patients achieve improved intermediate vision and a reduced incidence of halos and glare compared with other multifocal IOLs. I have now been using the AT LISA tri 839MP since November 2011, which coincided with the start of a German multicenter clinical trial, and have successfully implanted this lens in approximately 50 patients thus far.

**Vision.** Although no lens provides patients with the visual quality that they enjoyed in their youth, the AT LISA tri comes closer than any other multifocal IOL. No other lens design provides a more complete range of vision at all three distances without producing visual compromises. With more than 3



Figure 1. Global light transmittance with the AT LISA tri is 85.7%.



Figure 2. The AT LISA tri optic design is optimized for reduced potential visual disturbances and improved night vision.

months' follow-up in the AT LISA tri population, it is quite obvious that patient satisfaction at my clinic is extremely high, as approximately 90% report that they are either extremely or very satisfied with their overall vision and especially with their intermediate vision.

Patients also report that they are very comfortable with the quality of near and intermediate vision after surgery. The majority of patients report being able to read small print, even in low light conditions. One thing to note is that reading distance in most patients is a bit farther away with the AT LISA 839MP tri in comparison to the AT LISA 809MP bifocal lens design.

Visual disturbances. It is not uncommon for patients implanted with multifocal IOLs to experience visual disturbances such as halos and glare, especially when driving at night. However, with the AT LISA tri, the incidence of halos and glare is certainly less than with bifo-

cal lenses (Figure 2). In my patient population, only 50% even reported seeing halos directly after surgery. But, the even better news is that these same patients reported that the presence of halos decreased significantly 1 to 3 months after surgery. In fact, only two patients reported a lingering presence of halos 3 months after surgery but added that they were no longer bothersome.

**Neural adaptation.** I have noticed that neural adaption after AT LISA tri implantation is even quicker and more complete than after implantation of any other bifocal lenses I have experience with.

**Spectacle independence.** In this small series, 96% of my patients achieved spectacle independence after the AT LISA tri 839MP was implanted.

Overall impression. In short, I feel that the AT LISA tri makes not only patients happy but the surgeons who implant this lens as well. I hope future results stay this positive. For more information on my experience with this lens, watch my interview at eyetube.net/?v=ledef.



## CONCLUSION

Because of the excellent vision obtained at all distances with the AT LISA tri, the number of patients

for whom I prescribe the lens is growing. Since I began implanting the AT LISA tri, the number of eyes I implant with a bifocal lens design has decreased significantly, mostly because patients seem to achieve such great satisfaction after surgery and, in at least 90% of cases, report extremely or very satisfactory overall vision. I believe the true benefit of the AT LISA tri is the 50%, 20%, 30% light distribution for far, intermediate, and near vision, respectively, with significantly improved intermediate vision and markedly reduced presence of disturbing halos.

For the reasons mentioned above, I am more interested in implanting the AT LISA tri in younger patients who have an active lifestyle, who drive a lot at night, and who do a lot of computer work. All of these patients like the AT LISA tri IOL, because it enhances their vision at all distances and allows them to remain active. Because of the high level of patient satisfaction, I am convinced that, with this new technology, more doctors will offer the AT LISA tri lens to even more patients.

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