REFRACTIVE RESULTS WITH PREMIUM IOLs + ORA SYSTEM

ORA SYSTEM® is an aberrometer installed in a microscope, in order to measure the refraction during the surgery, helping to the selection of the IOL and its orientation. It provides aphakic intraoperative and pseudo-aphakic information of the IOLs selection and its placement. That contributes to the improvement of the refractive results of our patients.

Material and Methods

We compare the results between two groups of patients. The first group, 148 eyes performed a femtosecond laser (Catalys) cataract surgery using or not, Premium IOLs implant. And the second group, 47 eyes, all of them with Premium IOLs done with Catalys and intraoperative calculation of spherical power and the astigmatism with Ora System. Multifocals lenses and/or torics were implanted.

Results

12,8% of the eyes, torics lens (mono and multifocals) were implanted, and 40,4% of the eyes were required paired incisions or IRL because of the control of the astigmatism, always guided intraoperatively by the ORA.

The target in our results is +/- 0,5 diopters in the Spherical Equivalent (EE) final, and +/-0,75 diopters in the final astigmatism. We obtein:

- First Group: 85,81% of the eyes in the EE have achieved the target, and 78,38% of the eyes in astigmatism.
- Second group: 97,87% of the eyes have achieved the target, and 93,62% of the eyes in astigmatism.

As for final prediction error of ORA, expected results were different from final refractive during three months: superior EE to 0,5 diopter in the 10% of the eyes, and superior to 0,75 diopters in the 2% of the eyes. Concerning to final astigmatism the difference was higher than 0,5 diopters in the 21% of the eyes, and none of those eyes was superior to 0,75 diopters. The final axis prediction was superior to 85%.

Conclusion

After a learning curve in ORA’s management, our finals refractives results have significantly improve in the routine using of the ORA System. We show example videos of how use ORA and how control intraoperative astigmatism.