

Chapter 6

The Basics of the Alpains Method

GETTING WITH THE PROGRAMS

A number of years ago, I published a paper titled, “Practical Astigmatism Analysis for Refractive Outcomes in Cataract and Refractive Surgery.”¹ Those who use the Alpains Method quickly develop the ability to interpret the vector diagrams, values, and indices central to the methodology. Like an unfamiliar software program that soon transforms into an indispensable tool, the Alpains Method for these clinicians becomes second nature. For those who have yet to assess or utilize the method, the practicality of it may not be immediately apparent. This chapter contains an overview of the Alpains Method and a few basic observations that may help even seasoned users.

The Alpains Method is not something typically brought into the operating theater. The Alpains Method’s primary applications are in planning and assessing cataract and refractive surgery. The Alpains Method is programmed into many corneal topographers using the iASSORT² (Alpains Statistical System for Ophthalmic Refractive surgery Techniques) software; it is also part of the comprehensive ASSORT program,³ the VECTrAK program,⁴ and online calculators for vectors,⁵ femtosecond laser limbal relaxing incisions,⁶ and toric intraocular lenses (IOLs).⁷ These programs are detailed in Chapter 24. Briefly, ASSORT, iASSORT, and VECTrAK reveal trends that can be useful in making modifications to technique or instrumentation to improve future results. The online calculators provide Alpains Method planning and analysis of single cases at a time, whereas, the ASSORT and VECTrAK software allow analyses of multiple cases and their storage in a database.

For corneal topographers that incorporate the Alpains Method in their programming, measurements such as simulated keratometry (SimK) and axial power are automatically imported into the vector calculations. The ASSORT software is in fact a complete patient record, capable of analyzing all measurable ophthalmic parameters, such as intra-