

SURGICALLY INDUCED ASTIGMATISM CALCULATOR: HOLLADAY VERSUS ALPINS METHODS

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ABSTRACT

Aims: Aim of this study was to compare the surgically induced astigmatism (SIA) values produced by Holladay and Alpins method SIA calculators.

Methodology: This retrospective study involved 80 eyes of 72 subjects who underwent uneventful phacoemulsification cataract surgery. The pre- and post-operative K-readings were obtained from the subjects' medical record for individual SIA determination using the SIA2.1 (Holladay method) and VectrAK calculators (Alpins method).

Results: There was no significant difference between the SIA2.1 and VectrAK calculators in determining individual SIA values ($P= 0.70$). The 95% limits of agreement between these two different method calculators were very tight (0.006 D only).

Conclusion: Both Holladay and Alpins method SIA calculators provide a comparable SIA value. Hence, Holladay and Alpins method SIA calculators can be used interchangeably.

Keywords: surgically induced astigmatism, Holladay method, Alpins method