

Adjustment of Phaco Entrance According to Pre-Existing Astigmatism

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ABSTRACT

Background: Astigmatism is the fundamental reason of visual imperfection after successful cataract surgery and may necessitate wearing correcting glasses eventually patient nonsatisfaction. However, there are many modern sophisticated ways to treat astigmatism. Our study deal with the easiest affordable way in the same cataract surgery by manipulating the probe entry according to the pre-existing astigmatism. **Aim of the study:** This study is done to show the ability of astigmatism treatment to certain extent by phacoemulsification technique. Using same technique and available tools. Obtaining better visual outcomes by only adjusting the sites of entrances. **Methods:** 35 eyes from 28 patients with cataract and regular astigmatism more than 1 dioptre without a history of prior ocular operation or trauma or morbidity were operated and followed for a year in the period between January 2023 and January 2024. All done by the same surgeon using the same phacoemulsification technique. The patients classified into 3 groups according to the type of astigmatism. **Result:** We see that the high levels of astigmatism preoperatively, were significantly decreased in the 1st month postoperative, average of 2.25 ± 0.75 dioptries to 1.5 ± 0.75 dioptries ($P= 0.001$). Then we notice stable readings through while the next examination schedule which was programmed three, six, and twelve months. **Conclusion:** Performing the phaco scratches on the sharp meridian is simple method of correcting mild and moderate astigmatism without the need of sophisticated tools. Unlike the greater degrees of astigmatism which necessitate using more advance techniques.

Keywords: With the rule astigmatism, Against the rule astigmatism, Best corrected visual acuity, uncorrected visual acuity.

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