

### SUMMARY

The problem of postoperative astigmatism, although dependent on many factors, the site of incision was the only parameter to be studied.

Two types of operations were performed on the 40 eyes of the 37 persons studied for this work, 20 of these cases were operated by the scleral incision method while in the other 20, the mid limbal incision technique was used. The cases were randomly attached to the two groups according to the site of incision.

Our aim in this study was to compare between 2 common cataract incisions scleral and mid limbal while achieving the minimum astigmatic error possible in both. These incisions were selected as they were commonly performed on a large scale in our university hospital. The description of each incision and its method of closure were properly clarified and all the incisions that did not fit that given definition were rejected.

Incision closure technique using interrupted 10-0 nylon with controlled suture tension was the standard technique in all cases which have helped in the easy identification of the stress lines caused by tight suture.

A twelve-week study of post operative astigmatism was conducted. keratometric reading of anterior corneal surface as well refraction were recorded.

Keratometer, refraction, Keratotomy and photokeratography were used for evaluation of astigmatism. Selective suture cutting in cases of high astigmatism more than 2 diopter manifest were done at the 6th week postoperatively to expedite visual rehabilitation. generally speaking our data suggests that scleral section may be better than midlimbal. K reading and manifest astigmatism were less in amount in scleral than midlimbal group during the study period even from the start. However midlimbal section is preferred in cases of flat vertical meridian (high against the rule astigmatism) preoperatively because it induces steepening of vertical meridian.

In cases of high astigmatism due to wound edges overlapping , it is preferable to do wound revision from the start because delay will not improve the condition.