SUMMARY

SUMMARY AND CONCLUSION

Subscleral trabeculectomy has been subjected through the years to numerous modifications regarding, the type of conjunctival flap, the shape of the scleral flap, the type of suture material.

It has been a definite tendency over the past few years to minimize usage of suture material up to advocating sutureless surgery and this is applicable to cataract and glaucoma surgery.

These trends have been supported by the evident greater wound stability, less tendency to postoperative astigmatic shift and hence faster post operative physical and visual rehabilitation.

The present study was conducted to evaluate the potential advantages and disadvantages, success rate, and complications of this procedure for glacuoma surgery by **Lerner (1997)**, which includes the formation of a filtration fistula without any dissection of the Tenon's capsule, through a small incision, as an alternative to trabeculectomy with or without pharmacologic wound modulation.

The study was carried out on sixty eyes of fifty patient undergoing a small incision trabeculectomy avoiding Tenon's capsule. (microtrabeculectomy) using Kelley Desement membrane punch.

Complete success in the study was defined as an IOP less than or equal to 20 mmHg without any therapy, whereas, qualified success was defined as an IOP not exceeding 20 mmHg with topical antiglaucoma medications, follow up of the studied eyes to the sixth post operative month revealed that 91% of cases were able to stop their anti-glaucoma medications completely, 3% of cases were controlled with topical therapy, and 6% showed failure and needed resurgery.

This new technique is a low cost and safe alternative to conventional trabeculectomy that effectively reduces intraocular pressure. The use of a small 2.5 mm incision which obviates the dissection of the Tenon's capsule and subsequent subconjunctival fibrosis, the absence of requirement of any sophisticated instruments, and the absence of any major complications which are encountered with the use of anti-metabolites entails that this procedure be performed more often in glaucomatous eyes needing filtration surgery. Also, Microtrabeculectomy in eyes with high risk of scarring was found efficacious and relatively safe. The relatively small peritomy, the tunnel approach, and the avoidance of radial incisions seen to offer important advantages over the standard trabeculectomy.

The current procedure also entails several technical advantages. A sclerocorneal pocket, rather than a scleral flap, eliminates the need to grasp a scleral flap and pull it anteriorly

during the anterior incision of the trabeculectomy block, as is generally done in a standard trabeculectomy. This manipulation is occassionally risky, especially for a thin, friable scleral flap. Furthermore, the small sugical area, adjacent to the limbus, eliminates the need for a bridle suture. Furthermore, the operation time is considerably shorter than that of the standard procedure.

Also, being a very small incision, leaving other areas untouched in case additional intraocular surgeries are required. Cautery is used minimally or not used at all, avoiding other stimulus for post operative scarring.

Although longer follow up is necessary. These results are encouraging. This procedure, which is performed with non-sophisticated instruments, may provide some advantages over conventional trabeculectomy.