

Releasable Sutures in Trabeculectomy

Rami Elsadig Ibrahim*

Consultant of Ophthalmology, Glaucoma Specialists, Oman

*Corresponding Author: Rami Elsadig Ibrahim, Consultant of Ophthalmology, Glaucoma Specialists, Oman.

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The Moorfields safer surgery indicates that the releasable sutures are a very important step in trabeculectomy. These sutures are very important for controls of the IOP following the postoperative period [1].

The IOP and anterior chamber depth can be managed well by using the releasable sutures [2,3]. Complications of the early postoperative period related to shallow or flat anterior chamber can be overcome by using the releasable sutures.

Peripheral anterior and posterior synechiae, corneal decompensation, and cataract formation, these complications related to shallow anterior chamber.

Also, posterior segment complications, such as choroidal detachment, macular edema, and suprachoroidal hemorrhage can be prevented by using the releasable sutures [4].

About the technique

A 10-0 nylon suture is used. Step 1: The suture goes through the cornea 1 mm anterior to the limbus then exits through the sclera adjacent to the flap. Step 2: The needle is goes through the scleral flap and sclera adjacent to the flap. Step 3: The needle goes through the sclera then exits through the cornea. Step 4: Then the suture is tied up.

The surgeons have developed a technique such as interrupted, externalized releasable sutures to avoid difficulty in laser suture lysis. Cohen and Osher were developed this technique and became widely used [1].

Once there is a hemorrhagic, thickened, or edematous conjunctiva, a releasable sutures is easily removable even if there is no visualisation of the scleral flap.

Complications experienced with use of releasable sutures were minimal.

Conclusion

Shallow and flat anterior chamber can be secured by using the releasable sutures. Also, trabeculectomy with releasable sutures gives long-term control of intraocular pressure.

In the early postoperative period, the releasable sutures can prevent shallow anterior chamber and hypotony thus minimised the short-term complications. Once the wound and anterior chamber are stabilized, the sutures are removed to encourage the outflow of aqueous humor. This gives a good result with bleb function and provides lower long-term IOP. We found this technique so effective that we have switched entirely to releasable sutures in our glaucoma practice.





Figure 1: This photos show my patients with releasable sutures with good anterior chamber depth and good IOP control.



Figure 2: This photos after removing the releasable sutures with good anterior chamber depth and controlled IOP.

Bibliography

- 1. Cohen JS and Osher RH. "Releasable scleral flap suture". Ophthalmology Clinics of North America (1988): 1187-1197.
- 2. Johnstone MA., *et al.* "A releasable scleral-flap tamponade suture for guarded filtration surgery". *Archives of Ophthalmology* 111.3 (1993): 398-403.
- 3. Johnstone MA and Ziel CJ. "Releasable scleral flap tamponade suture to control IOP and chamber depth after filtering surgery". *Investigative Ophthalmology*.
- 4. Fiore P., *et al.* "The effect of anterior chamber depth on endothelial cell count after filtration surgery". *Archives of Ophthalmology* 107.11 (1989): 1609-1611.

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