The goal of glaucoma filtering surgery is to establish a permanent flow of aqueous from the AC to subconjunctival space and thereby lowering IOP. However, the procedures tend to fail over time because of fibroblastic proliferation and subconjunctival fibrosis that occurs during the normal healing. Various modifications to trabeculectomy have been tried over the years. In this new modification for trabeculectomy a small perpendicular strip of sclera is removed in addition to ablation of the trabecular meshwork. Tenonectomy done reduced post operative fibrosis thereby reducing bleb failure.

**Steps of modified trabeculectomy:**

- Peribular block was performed with 2% Xylocain plus sensorcaine / adrenalin / hyalase.
- The conjuctival flap was dissected towards the limbus from 7mm to 8mm away
- The first limbal-based scleral flap of one-third thickness, measuring 4mm perpendicular to and 6mm parallel to the limbus, was dissected until the surgical limbus was seen (Figure 1 and 2)
- A second scleral flap was marked out with a Bard Parker knife in the centre of the area left after the first flap, leaving 2mm on either side - dissection started 1mm above the upper margin of the first flap (Figure 3)
- On reaching the surgical limbus the second scleral flap was lifted and the anterior chamber was entered with an anterior chamber puncture blade (Figure 4)

**First limbal based scleral flap Markings**

**Second scleral flap being Dissected**

**Second scleral flap lifted at suprical limbus & A.C. entered**

**Trabecular meshwork being cut along with the second scleral flap.**
Peripheral iridectomy was performed (Figure 6 and 7)

- The first scleral flap was sutured with 8-0 ethicon at the corners (Figure 8)

- Peripheral iridectomy was performed (Figure 6 and 7)

- Tenon’s membrane was dissected from the conjunctival flap and tenonectomy was performed (Figure 9 and 10)

Window after cutting trabecular meshwork

First scleral flap sutured back of the corners

Peripheral iridectomy

Tenon’s membrane dissected from conjunctival flap
Superior opening of functional scleral tunnel (Figure 13)

**OBSERVATIONS**

- Modified trabeculectomy with tenonectomy offers a reliable method of controlling IOP (90-92%) for patients with glaucoma.
- The surgical procedure was consistent regardless of the type of glaucoma or the IOP.

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