A NEW TECHNIQUE FOR TRABECULAR BLOCK EXCISION DURING STANDARD TRABECULECTOMY

Standart trabekülektomide yeni bir trabeküler blok eksizyon tekniği

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Summary: *During standart trabeculectomy, a rectangular trabecular block, sometimes can not be excised uniformly and during this effort, problems such as haemorrhage into the anterior chamber or damaging the anterior lens capsule can be encountered. In order to avoid this complication, a new technique for trabecular block excision has been described.*

Key Words: *Glaucoma, Glaucoma filtration surgery, Trabeculectomy*

Özet: *Standart trabekülektomide trabeküler blok eksizyonu sırasında bloğun düzgün çıkartılmasına yönelik efor nedeniyle hemoraji ya da lens ön kapsülü zedelenmesi gibi komplikasyonlar görülebilmektedir. Bu gibi komplikasyonları önlemek amacıyla yeni bir trabeküler blok eksizyon tekniği tanımlanmıştır.*

Anahtar Kelimeler: *Glokom, Filtran glokom cerrahisi, Trabekülektomi*

Trabeculectomy is still the preferred surgical intervention in glaucoma filtering surgery, although the original technique has been described and published nearly twenty-five years ago (1). However, a rectangular trabecular block, sometimes can not be excised uniformly after the scleral flap has been prepared and during this effort, problems such as haemorrhage into the anterior chamber, damaging the anterior lens capsule, iridodialysis or entering into the posterior chamber can be encountered. We have been using a modified technique to avoid possible complications of trabeculectomy for over 3 years.

Similar to the classical method of Cairns, the conjunctiva and the Tenon's capsule are cut 8 mm away from the limbus, and a blunt dissection is made at the upper side of the eye to form a limbus based conjunctival flap.

Episcleral vessels are cauterized with wet field cautery and a 1/3 thickness lamellar scleral flap (4x4 mm) is prepared and dissected until the corneaconjunctival junction is reached.

At this stage, according to our modification, semithickness trabecular grooves are prepared at the upper (corneal side) and the lower (scleral side) border of the trabecular system with a razor blade or diamond knife (Figure 1). Entering into the anterior chamber is made via the upper (corneal side) groove (Figure 2). Upper and lower grooves are connected by a vertical incision (Figure 3). After these three incisions, *en bloc* trabecular resection (1x4 mm) is completed by a final incision made at the lower groove with a razor blade (Figure 4). Iridectomy is performed conventionally. The scleral flap is sutured to its bed with interrupted 10/0 nylon monofilament sutures.

Preparation of parallel horizontal grooves is the crucial point in this technique. In doing so, the block can be excised uniformly and any possible mentioned complications can be prevented. We have been using this modified technique for over 3 years and have not encountered with any of the mentioned complications. We believe our technique of trabecular block excision is easier than other techniques and increases the success rate of trabeculectomy.

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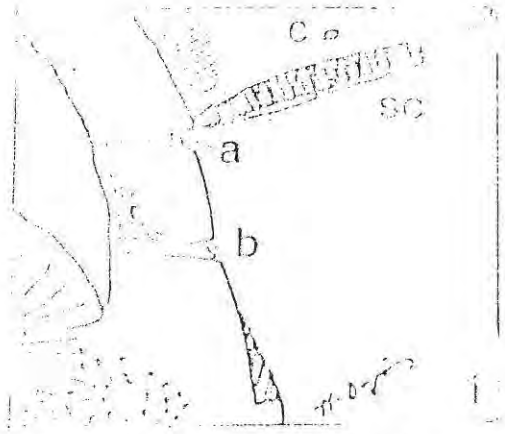

Figure 1. Preparing of the upper (a) and the lower (b) grooves; c: conjunctiva; sc: sclera

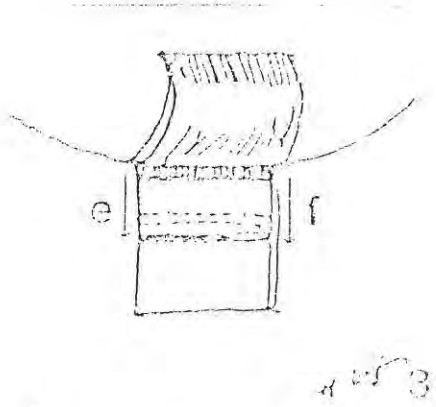

Figure 3. Vertical incisions (e & f) connecting upper and lower grooves

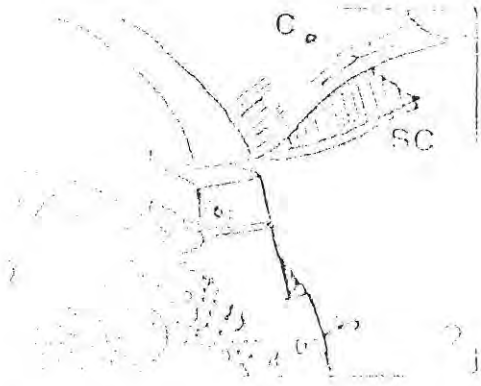

Figure 2. Entering into the anterior chamber from the upper groove

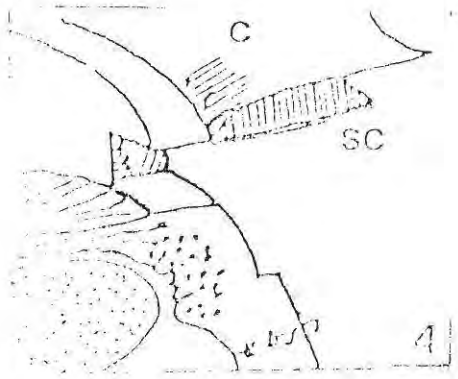

Figure 4. Trabecular excision completed

REFERENCE

1. *Cairns JE. Trabeculectomy. Trans Am Acad Ophthalmol Otolaryngol 1972; 76: 384-391.*