SURGICAL MANEUVERS

Modified ptosis repair provides greater correction more quickly

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Ptosis, a relatively common complication of intraocular surgery, most often occurs in older patients. Ptosis can be corrected by a number of techniques, all of which share the goal of improving functional vision.

Since the older population has higher morbidity, with longer operative time, a ptosis procedure performed in the least amount of time would have advantages over others with similar corrective ability.

During ptosis repairs performed with careful anatomical dissection, I discovered that when the ptosis is secondary to prior intraocular surgery, the internal levator muscle is often partially detached and weakened to about 10 mm above the tarsus. When reattached to the tarsus, the ptosis resolves. Since careful anatomical dissection is required in this approach, and creates more operative time and thus greater chance of morbidity, I considered alternatives to time-consuming anatomical dissection.

A conjunctival Mueller's resection as described by Putterman is an attractive alternative. However, after performing this procedure, which is described in numerous oculoplastic surgical texts, some of my patients remained undercorrected. Though benefiting from a procedure requiring less operative time and therefore causing less morbidity, they were not obtaining what I would consider to be satisfactory results.

For this reason I modified the conjunctival Mueller's resection. The technique applies the anatomical information obtained in the careful dissecting approach together with the advantages of the Putterman procedure, which is performed more quickly and with less risk to the patient.

Prior to surgery, I perform a Neo-Synephrine (phenylephrine HCl, Winthrop) test. Based on the response of the lid to this test, I modify the amount of resection I perform.

Assuming an equal lid height after Neo-Synephrine is applied to the ptotic lid, I plan an 8-mm combined conjunctival Mueller levator muscle resection. After the lid is everted with a Desmarres retractor, I clamp not only the conjunctiva and Mueller's muscle, but also the levator aponeurosis into a Putterman conjunctiva Mueller's resection clamp. This has to be modified individually in accordance with one's own surgical result, very similar to the amount of recession and resection in strabismus surgery.

After placement of my running suture and resection of tissue in the clamp, I not only accomplish a conjunctival Mueller's resection, but also an internal approach to a levator resection and reattachment to the superior edge of the tarsus. The risk of uncontrolled correction by performing a levator resection and reattachment without dissecting and identification of this tissue is minimized by individual variation of the amount of tissue in the clamp in accordance with Neo-Synephrine test results and the fact that the weakening of the levator is generally to about 10 mm above the tarsus in these patients.

I have found this combined procedure to have much greater corrective ability than the conjunctival Mueller's resection approach, and it can be performed more quickly than techniques requiring the careful dissection of the internal levator prior to resection and reattachment. ■

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