Further Considerations in the Management of Nystagmus with Myectomy

To the Editors:

Regarding our recent article “Myectomy of the Extraocular Muscles Without Rereattachment as a Surgical Treatment for Horizontal Nystagmus,” the authors would like to make the following amendments to the section “Technique in Detail” to assist those intending to perform and/or investigate this operation with the full benefit of our latest observations.

First, the superior and inferior oblique muscles are no longer considered part of the routine procedure for the reduction of horizontal nystagmus amplitude in younger patients and are included in the procedure only if concurrent A- or V-pattern strabismus or dissociated vertical deviation is simultaneously addressed.

Second, we have observed in a subsequent population of 15 patients that preexisting strabismus and prevention of postoperative exotropia can be addressed by graded surgery on the nasal half of the superior rectus muscle. Although a full report is in preparation, anecdotal evidence suggests the following paradigm significantly reduces the risk of reoperation:

1. For preexisting esotropia, resect the nasal half of the superior rectus muscle 0 mm and transpose 4 mm;
2. For preoperative orthotropia, resect 2 mm and transpose 5 mm;
3. For preoperative exotropia, resect 4 to 6 mm and transpose 6 mm.

Myectomies that allow for full ocular rotation postoperatively are 20 mm for the lateral rectus muscle and 12 mm for the medial rectus muscle. However, it is critical to reduce these amounts by the amount of resection or recession if previously operated on because we suspect both procedures result in a shorter muscle. Thus, if a patient had a lateral rectus muscle previously recessed 7 mm, the myectomy should be reduced to 13 mm.

Finally, we would like to reemphasize the sequence of postoperative healing because there appear to be three clear phases not previously recorded for nystagmus surgery, all of which should be clear to the physician and patient to manage postoperative expectations accurately: at week 1, the patient has poor versions, divergence insufficiency esotropia, and quiet nystagmus; at week 2, the patient has improved versions, less divergence insufficiency esotropia, and nystagmus 30% return; and at weeks 12 to 24, the patient has restored versions, alignment, and nystagmus reduction optimal with central null zone.

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