Letters to the Editor

CORNEAL TRACTION SUTURE

It was a pleasure to read about Dr. Salz' inferior limbal traction suture for anterior segment surgery in the September 1987 issue of Ophthalmic Surgery (18:687-688). His suture is very similar to the corneal traction suture that I described in the July 1973 issue of American Journal of Ophthalmology.1

My reasons for introducing this suture were the same as his: to better control the globe, to reduce the risk of retinal perforation, to reduce the incidence of postoperative ptosis, to avoid subconjunctival hemorrhaging and patient discomfort and pain that the superior rectus bridle suture occasionally causes, and also to provide relief of impending vitreous loss.

I have, since 1973, used almost exclusively this corneal traction suture successfully and without complications for all types of intraocular surgery as well as extraocular muscle surgery. Most of the time I use only one suture (4 o'clock); however, if I do not get a good bite, then I put in a second suture at 8 o'clock.

In spite of my not using superior rectus sutures anymore, the percentage of my postoperative cataract ptosis cases has not changed from the time when I routinely used the superior rectus suture. I therefore am quite convinced that the superior rectus suture is not the causal agent of postoperative ptosis.

Reference

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DISPARATE DIAMETER TECHNIQUE

I would like to congratulate Drs. Perry and Foulks ("Oversize Donor Buttons in Corneal Transplantation Surgery for Keratoconus," Ophthalmic Surgery, October 1987, 18:751-756) for again having drawn to our attention the various effects of the use of disparate diameter corneal graft and recipient opening in the surgical management of keratoconus. Although they state that the first suggestion of this was in 1949 by Franchesctti, that article referred to the use of a larger diameter, 0.1 mm, only for lamellar keratoplasty. In fact, used a set of his trephines when I first began to use my disparate diameter technique in penetrating keratoplasty in 1974 and first reported it before the Second International Corneal Congress in Washington in May 1975. At that time, Kelly and I described the use of a 0.1, 0.2, and 0.5 mm difference for phakic and aphakic corneal grafting, with the exception of keratoconus, for which I then recommended the same size graft button and recipient opening.1-3 I was still of this opinion in 1977 and so stated in my textbook4 (page 46). In that same volume it was stated that neither the type of suture closure nor the size of the graft affected the amount of postoperative astigmatism.

Subsequently, however, I found that I was inducing an excessive amount of corneal flattening, keratometry average 39 to 41 diopters, rather than the more ideal 43 diopters. By 1980 I advocated a 0.2-mm larger donor button than recipient opening routinely in keratoconus. This has resulted in an average corneal curvature of 42.75 diopters, with more of our patients achieving emmetropia in normal length eyes. Sutures in our series were removed on an average of 7 months postoperatively. We have not had experience with using 0.5-mm donor buttons in keratoconic eyes, having stated in 1975 that this size difference was indicated only in aphakic eyes where one wished to reduce the hyperopia by a steeper postoperative cornea, as indeed Drs. Perry and Foulks have reported. Except in rare cases when an intraocular implant is neither present nor inserted at the time of surgery or in a case where a steeper cornea is desired for optical reasons (to reduce hyperopia), we now use a 0.2-mm larger donor button cut on a teflon block from the endothelial side in all penetrating keratoplasties.

References