SUPERIOR OBLIQUE TUCKING: A PROMISING WAY OF TREATING EXCYCLOTORSION

To the Editor: Pineles and Velez[1] recently presented their use of anterior superior oblique tuck in a series of 5 patients with a mean excyclotropia of mean 10° ± 3°. Postoperatively exyclotorsion decreased significantly, to 2.5° ± 2°. In their procedure the tendon is split in a way similar to the Harada-Ito technique and one or two sutures are placed to tuck the superior oblique tendon. They claim that this is a new procedure, only reported by Hoeckele and colleagues.[2] They adopted it because it was more efficient and simpler than the classic Harada-Ito.

We would like to point out that in 2009 Ameri and colleagues[3] published "Intraoperative adjustable suture surgery for excyclotorsion: a modification of the Harada-Ito procedure," in which they discussed the treatment of 2 patients with excyclotorsion and no vertical deviation using anterior superior oblique tucking. After engaging the superior oblique tendon with a Stevens hook, the anterior one-third of the tendon was split longitudinally with iris spatula. That portion of superior oblique was then tucked using adjustable nonabsorbable suture. Postoperative double Maddox rod test showed no torsion in the first patient (preoperation excyclotorsion was 30°) and only 2° remaining from primary 15° in the second patient. The effect of this procedure was maintained in the long term. Therefore, Ameri and colleagues[3] should be credited as the first to publish this new technique for treatment of excyclotorsion.

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References

1. Pineles SL, Velez FG. Anterior superior oblique tuck: an alternate treatment for excyclotorsion. J AAPOS 2018;22:393.e1.
2. Hoeckele N, Kaeser PF, Klainguti G. Results of anterior tucking of the superior oblique muscle tendon in bilateral fourth nerve palsy. Klin Monatsbl Augenheilkd 2015;232:452-4.
3. Ameri A, Anvari F, Jafari AK, Ahadzadeghan I, Akbari MR, Rajabi MT. Intraoperative adjustable suture surgery for excyclotorsion: a modification of the harada-ito procedure. J Pediatr Ophthalmol Strabismus 2009;46:368-71.

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REPLY

We thank Ameri and colleagues for bringing to our attention their publication on selectively operating the anterior fibers of the superior oblique to manage symptomatic excyclotropia.[1] They indicate that 2 patients with excyclotorsion but without a vertical deviation underwent an intraoperative adjustable suture modification of the Harada-Ito procedure.

The procedure described by Ameri and colleagues is very different from a Harada-Ito procedure as originally described in 1964.[2] Ameri and colleagues performed a tuck of the anterior fibers, not an advancement. Conversely, Harada and Ito reported an advancement of the anterior fibers and not a tuck of the anterior fibers. In the original publication by Harada and Ito, the superior oblique tendon was split into two halves. A suture transposed the anterior half 5 mm anterior to the superior oblique insertion. The superior oblique tendon was not disinserted. In 1974 Fells[3] modified the technique by disinserting and advancing the anterior half anteriorly and laterally. In 1981 Metz and Lerner[4] introduced adjustable sutures to the Fells technique.

Ameri et al indicate that their patients had excyclotropia but did not have vertical deviations; however, both of their patients had vertical deviations. Both of their patients had bilateral superior oblique paresis, and one had a vertical deviation in primary position. In both of their cases, their procedure corrected a large reverse vertical deviation in lateral gazes and in one case there was an additional vertical correction in primary position. Curiously, in their case 1 there was a correction of the right hypertropia in left gaze postoperatively, but the deviations in up left and down left gazes remained unchanged. And in case 2 a preoperative left hypertropia in left up gaze was fully corrected after bilateral superior oblique surgery. Despite their large split of the superior oblique tendon the correction of vertical deviation in lateral gazes likely indicate that their procedure not only increased the tension of the anterior fibers but also had an effect on the posterior vertical superior oblique fibers. In our series,[5] patients underwent smaller amounts of tuck and no vertical correction was seen in any of the patients undergoing a unilateral procedure.

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References

1. Ameri A, Anvari F, Jafari AK, Ahadzadeghan I, Akbari MR, Rajabi MT. Intraoperative adjustable suture surgery for excyclotorsion: a