Sir,

Isolated Muller's muscle resection for the correction of blepharoptosis

Having read with interest the article on conjunctiva-sparing Muller's muscle resection for correction of blepharoptosis,[1] we would like to share our experience and state some variations to the technique that have given us good results.

Case report

In our technique, the conjunctiva is incised at the upper border of the tarsus and dissected upward, freeing it from the Muller's muscle, which is then divided at the upper tarsal border (Figure 1a) and separated from the levator aponeurosis. A measured length of Muller's muscle is resected based on our nomogram (Figure 1b). The free edge of the muscle is sutured to the upper border of the tarsus; the conjunctiva is sutured separately to the anterior aspect of the upper border of the tarsus. We felt that going onto the skin through the levator aponeurosis[1] introduces mechanisms that would influence the amount of correction by involving the aponeurosis. A nomogram to resect a measured amount of Muller's muscle was developed based on our experience gained since 1984. We have realised that less than 8 mm of resection has no effect, but an additional 2 mm resection for every millimetre of ptosis has given consistently good results.

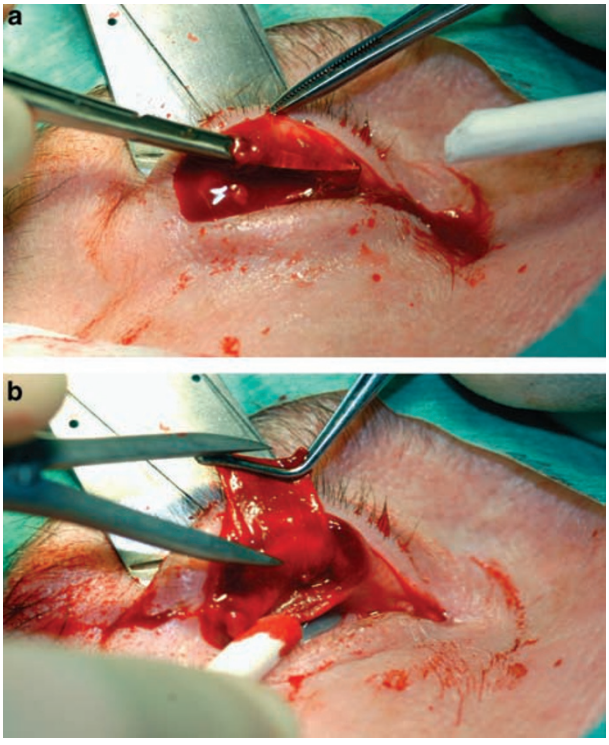

Figure 1 (a) Dissection of Muller's muscle. (b) Nomogram-based resection of Muller's muscle.

Comment

We found that resecting only the central two-thirds width of the Muller's muscle using the same nomogram also gives comparable results. Preserving the medial and lateral extensions of the Muller's to the levator horns is considered important as lacrimal ducts are closely associated with the lateral extension.[2] We have not encountered any uncorrected medial or lateral droop in this group of patients.

A review of our results in the two series—19 eyes of 15 patients, where the entire width of the muscle was resected (1998–2001), and 28 eyes of 21 patients, where only the central two-third width was resected (2002–2007)—has confirmed good comparable outcomes.

We like to commend our approach, which, in addition to tissue conservation, ensures measured amount of resections with minimal interference with the anatomy of the eyelid and provides an excellent opportunity for trainees to understand surgical anatomy of the lids and basic principles of eyelid surgery.

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Sir,

Reply to Madhusudhan *et al*

We thank Madhusudhan *et al* for their interest in our paper entitled 'Isolated Muller resection' and would like to take the opportunity to respond to the comments raised.

Although the Muller muscle is the tissue of interest in both techniques, there is a fundamental difference to account for advantages, described in our paper.

Like Putterman's, Chandra's technique, a minor modification of Dortzbach's paper published in 1979,[1] does not allow perioperative adjustment and depends on the use of a nomograms. In our experience with more than 300 Muller muscle resection performed over the last 5 years, in different degree of eyelid ptosis severity, one does not always find correlation between the degree of eyelid ptosis and the amount of Muller muscle resected to achieve the desired effect. Moreover, the result of phenylephrine test does not always correlates with the outcome of Muller resection.[2] Intraoperative adjustment therefore opens the opportunity to be

able to use the technique in more severe degree of eyelid ptosis.

Similarly, in their technique, there is no opportunity for postoperative adjustment as the sutures do not exit through the skin. We feel that the timed removal of skin sutures offer great advantage over anterior levator resection as well as Putterman's and Chandra's techniques. Another advantage of external suture is the precise placement and augmentation of skin crease as well as pleasing lash eversion often desired in correction of lash ptosis, when present.

In our experience, resecting the whole width of Muller muscle has never led to damage of the lacrimal gland ductules as we do not extend our incision too far laterally into lacrimal gland ductules. We, therefore, do not see any advantage in using only the central part of the muscle, which might deny us the correction of severe medial droop seen in some advanced cases, as well as adding another surgical step.

Like minimal incision anterior approach, we have tried to perform Muller resection using only one central suture.

The lack of opportunity to correct the medial droop has let us to abandon this in favour of resection of whole width using three sutures as described in our technique.

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Sir,

Chronic endophthalmitis after cataract surgery secondary to *Ochrobactrum anthropi*

We recently encountered a rare case of post-operative *Ochrobactrum anthropi* endophthalmitis potentially caused by percutaneous transluminal angioplasty (PTCA) prior to cataract surgery. *O. anthropi* has caused catheter-associated bacteraemia, osteochondritis, and pancreatic abscess.[1–3] However, we identified only a single report of *O. anthropi* endophthalmitis following cataract surgery in the literature.[4]

A 75-year-old man was referred for chronic endophthalmitis following uneventful cataract extraction and posterior intraocular lens (IOL) placement in April 2006. Medical history included myocardial infarction and PTCA 1 year previously (3 weeks before cataract surgery). Low-grade intraocular inflammation was noted on post-operative day 9 and treated with steroid drops; yet pan-uveitis persisted for 9 months. Pars plana vitrectomy, intravitreal antibiotic injection, two anterior chamber taps, and intracameral antibiotic injection were performed; the initial tap revealed *O. anthropi*.

Our initial evaluation (April 2007) detected keratic precipitates on the endothelium, fine white conglomerates on the IOL, and diffuse debris in the vitreous. We performed complete capsulectomy, IOL removal, vitrectomy, and intravitreal vancomycin and amikacin injection. Vitreous and capsular bag cultures grew *O. anthropi* sensitive to ceftazidime, imipenem, ciprofloxacin, and trimethoprim. Therapy included intravenous Tieman and topical ciprofloxacin. The infection cleared, and vision recovered from 4/20 to 2/20 with spectacles.

Ochrobactrum anthropi sepsis usually occurs with indwelling catheters or other medical prostheses.[5] Our patient could have been infected during cataract surgery or PTCA; *O. anthropi* infections manifesting within 3 weeks of central venous catheter placement and within 70 days of mitral valvuloplasty have been reported.[6,7] Our patient received PTCA 3 weeks before cataract surgery and symptoms occurred within 10 days. We assume that *O. anthropi* clustered in the vitreous first, then circulated to the anterior segment.

Our patient received cataract surgery at another clinic; so his blood culture results were unavailable. To reduce the risk of infection, surgeons should evaluate the patient's complete detailed medical history prior to surgery. A recent vascular catheter procedure represents a risk for *O. anthropi* infection.

Ochrobactrum anthropi is resistant to various antibiotics[4] and post-cataract surgery-associated *O. anthropi* endophthalmitis has been treated by removing the IOL and residual capsule.[4,8] To clear the infection, the entire capsular bag must be removed.

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