unaware of losing a contact lens and had no medical problems.

The patient's visual acuity was 20/20 in each eye with normal extraocular motility and pupillary reactions. The patient had a well-defined, mobile, cystic lesion 1 cm wide in the left upper eyelid over the upper half of the tarsal plate. The patient had 3 mm of lateral upper-eyelid retraction below the cyst (Fig. 1) and bilateral conjunctival hyperemia.

The differential diagnosis included a benign cyst or a chalazion. After applying local anesthetic and sedating the patient, the lesion was reached through an eyelid-crease incision. The cyst, which involved the superior half of the tarsal plate, was completely excised, restoring the cyclid to its normal height and contour. The levator aponeurosis and Müller's muscle were not recessed.

The remaining tarsal defect was repaired by excising the tarsal plate inferiorly to create a straight edge. The tarsal plate and orbicularis oculi muscle layers were approximated with interrupted 6-0 polyglactin 910 sutures, and the skin was closed with 6-0 nylon sutures. Histopathologic study of the specimen disclosed a benign cyst surrounding a retained hard contact lens. At the two-year follow-up visit, the patient had normal eyelid height and contour (Fig. 2).

Although there are several possible reasons for the patient's eyelid retraction, we believe the contact lens may have mechanically vaulted the eyelid superiorly or may have caused vertical scar contraction to develop. Excising the retained lens and the cyst wall corrected both of these problems. We demonstrated that an embedded hard contact lens in the superior fornix can cause eyelid retraction rather than blepharoptosis.

## References

1. Green, W. R.: An embedded ("lost") contact lens. Arch. Ophthalmol. 69:23, 1963,



Fig. 1 (Weinstein and Myers). The patient has 3 mm of lateral upper-eyelid retraction in the left eye.

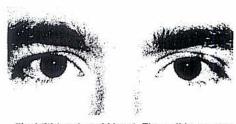


Fig. 2 (Weinstein and Myers). The eyelid retraction is no longer present after excision of the embedded hard contact lens and cyst wall.

- Nicolitz, E., and Flanagan, J. C.: Orbital mass as a complication of contact lens wear. Arch. Ophthalmol. 96:2238, 1978.
- 3. Sebag, J., and Albert, D. M.: Pseudochalazion of the upper lid due to hard contact lens embedding—case reports and literature review. Ophthalmic Surg. 13:634, 1982.
- 4. Shenken, E.: Traumatic dislocation of a contact lens into the eyelid. Can. Med. Assoc. J. 101:295, 1969.
- 5. Yassin, J. G., White, R. H., and Shannon, G. M.: Blepharoptosis as a complication of contact lens migration. Am. J. Ophthalmol. 72:536, 1971.

## Modified Tarsal Pillar Tarsorrhaphy

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The tarsal pillar tarsorrhaphy is a technique for permanent yet reversible narrowing of the interpalpebral fissure for the treatment of exposure-related keratopathy.\(^1\) This technique is successful but has minor complications. We modified this procedure to eliminate one of these complications, ectropion of the lower eyelid.

With the original technique, two rectangles of tarsoconjunctiva attached as pedicles to Müller's muscle and conjunctiva are taken from the upper eyelid. These pillars are sutured into an area of excised tarsoconjunctiva at the inferior margin of the lower-eyelid tarsus. We believe the 11% (four of 35 eyelids) incidence of ectro-

pion of the lower eyelid reported by Tanenbaum and associates was related to the design of the recipient site in the lower eyelid. The pillar pulls superiorly on the inferior tarsal margin while its thickness displaces the lowereyelid margin anteriorly away from the globe. The combined force vectors have led to ectropion of the lower eyelid.

Our modification uses the same technique for the upper eyelid, but the recipient site on the lower eyelid is created at the superior aspect of the tarsus to include the eyelid margin. The excised area is a full-thickness block of tarsoconjunctiva, approximately  $2 \times 2$  mm (Fig. 1). The pillars are inserted into the recipient site and attached securely with two fine absorbable sutures, positioning the medial aspect of each at the corneoscleral limbus (Fig. 2).

This modification was used in 30 consecutive patients whose mean follow-up period was 40 months. Neither contour abnormalities of the tarsal margin nor trichiasis has been observed. The tarsal pillars have been released in ten patients by a simple division flush with the inferior tarsal margin. The mean follow-up period for this group was 32 months, and there have been no complications. By changing the superior force vector to the eyelid margin and incorporating the pillar's thickness into the lower eyelid, we eliminated outward rotational forces and lower-eyelid ectropion.

Tarsal pillar tarsorrhaphy is successful as both a permanent and reversible technique for narrowing the interpalpebral fissure. Our modification has eliminated lower-eyelid ectropion.

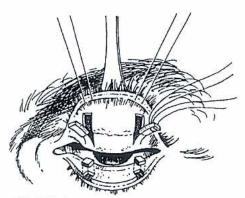


Fig. 1 (Steiner, Gossman, and Tanenbaum). Both eyelids are everted, showing the upper-eyelid tarsal pillars in continuity with Müller's muscle and conjunctiva. The recipient site includes the superior half of the lower-eyelid tarsus and conjunctiva.

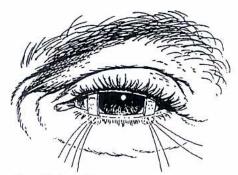


Fig. 2 (Steiner, Gossman, and Tanenbaum). Completed tarsorrhaphy showing each pillar secured to the donor site with two interrupted sutures (7-0 Vicryl). The margins of the conjunctival-Müller's muscle pedicles are positioned at the nasal and temporal limbal planes.

without losing the advantages of the original procedure.

## Reference

1. Tanenbaum, M., Gossman, M. D., Bergin, D., Friedman, H., Lett, D., Haines, P., and McCord, C. D., Jr.: The tarsal pillar technique for narrowing and maintenance of the interpalpebral fissure. Ophthalmic Surg. 23:418, 1992.

## Unilateral Posterior Lenticonus With Persistent Hyaloid Artery Remnant

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Posterior lenticonus or lentiglobus is a congenital or juvenile cataract that is usually unilateral and is diagnosed by a characteristic retinoscopic and slit-lamp appearance. The cause of this defect has been debated since its first description by Meyer<sup>1</sup> in 1888. Our patient had one possible cause.

A 3-year-old healthy boy had a one-year