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A Simplified Lateral Canthopexy Technique

Rizvi, Mort M.D.; Lypka, Michael M.D., D.M.D.; Gaon, Mark M.D.; Eisemann, Bradley B.A.; Eisemann, Michael M.D.; Lypka, Michael M.D., D.M.D.

□ Author Information

Department of Plastic and Reconstructive Surgery; Methodist Hospital and Weill Cornell Medical College; Houston, Texas(Rizvi, Lypka, Gaon, B. Eisemann, M. Eisemann)

1 Hermann Museum Circle Drive, Suite 3070; Houston, Texas 77004(Lypka)

Sir:

Lateral canthopexy has become a routine part of cosmetic lower blepharoplasty to prevent lower lid malposition, especially in those patients with laxity of the lower lid and negative vector anatomy. All canthopexy techniques involve securing the lateral retinaculum to the periosteum of the superolateral orbital rim with a suture. However, the surgical approach to identify the lateral retinaculum varies, with some techniques requiring more surgical expertise than others. Perhaps the most challenging technique is that of Jelks et al., who dissect the lateral retinaculum from above through an upper blepharoplasty incision. Dissection of the lateral retinaculum through the lateral extension of a lower blepharoplasty incision is advocated by others. In this article, we describe a technical modification of the Hamra transcanthal canthopexy that involves percutaneous placement of the canthopexy suture through the confluence of the superior and inferior gray lines at the lateral canthal angle.

An upper blepharoplasty is completed, but the lateral extent of the incision is not closed or, in the case in which upper blepharoplasty is not performed, a small incision is made in the upper eyelid crease laterally. An 18-gauge needle (Fig. 1) is used to create a puncture wound at the confluence of the superior and inferior gray lines at the lateral commissure of the eye. One arm of a double-armed 5-0 Prolene suture (Ethicon, Inc., Somerville, N.J.) is placed through the puncture wound, capturing the lateral retinaculum, and directed into the upper blepharoplasty incision, below the orbicularis oculi muscle. The second arm is subsequently placed through the same puncture wound but on a slightly different path into the upper lid incision. These two sutures are secured to the periosteum on the undersurface of the superolateral orbital rim at a level just above the pupil or superior limbus, thus tightening the tarsoligamentous sling. The suture is tied and tension of the lower lid is checked. (See Video, Supplemental Digital Content 1, which demonstrates the lateral canthopexy technique, http://links.lww.com/PRS/A164.)

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Fig. 1 Video. Supplemental ...

The lateral canthopexy described here is a modification of the Hamra transcanthal canthopexy. In our modification, a needle is used to access the lateral retinaculum and direct canthopexy suture placement. It is a minimally invasive technique that is simple to perform, especially in the hands of a novice blepharoplasty surgeon. An advantage of this technique is absolute assurance of capturing the lateral canthal tendon. Extensive dissection to identify the tendon is not required, which limits operative time and postoperative edema. Furthermore, recreation of the lateral retinaculum and canthal angle as in canthoplasty (cantholysis) techniques is obviated. With this minimally invasive technique, results have been excellent, with few complications.

DISCLOSURE

The authors have no financial interest to declare in relation to the content of this article.

Mort Rizvi, M.D.

Michael Lypka, M.D., D.M.D.

Mark Gaon, M.D.

Bradley Eisemann, B.A.

Michael Eisemann, M.D.

Department of Plastic and Reconstructive Surgery

Methodist Hospital and Weill Cornell Medical College

Houston, Texas

Michael Lypka, M.D., D.M.D.

1 Hermann Museum Circle Drive, Suite 3070

Houston, Texas 77004

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GUIDELINES

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Supplemental Digital Content

• PRS 125 6 2010 03 10 LYPKA 202016 SDC1.wmv; [Video] (48.41 MB)

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