

The Adherence of Skin and Levator Palpebrae Superior Is Not Necessary in Blepharoplasty of Asian Patients

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Formation of the double eyelid involves insertion of the levator aponeurosis to the pretarsal skin of the upper eyelid. In single eyelids, this structure is absent.¹ In upper blepharoplasty, doctors try to rebuild the connection of skin to the levator palpebrae superior,²⁻⁵ making the procedure a “physiological reconstruction.” However, some phenomena cannot be explained by theories that exist. First, sagging skin may also appear like a double-fold eyelid. Second, the use of a double eyelid patch (consisting of viscous membranes derived from soft plastics) can also form a double eyelid appearance. (See Video 1 [online], which displays the usage of a double eyelid patch to form a double eyelid appearance.)

Third, in the method used by Park and Park,² the skin and levator aponeurosis were not directly sutured, yet double eyelids could still be formed. Fourth, incision sutures were removed 5–7 days postoperatively, at which time no reliable connection was formed between the skin and levator. Therefore, although the levator is the motor system of lid crease formation, we speculate that a direct connection between the skin and levator is unnecessary for double lid formation.

During the past 2 years, 126 patients received upper blepharoplasty without suturing of the skin to the levator palpebrae superior. The incision is about 5–7 mm above the upper eyelid margin. During this procedure, a proportion of skin, the orbicularis oculi, and pretarsal tissues are removed. After stretching the skin and orbicularis oculi muscles and maintaining a certain tension, a 7-0 prolene or premilene suture was used to fix these skins and muscles to the pretarsal tissue. (See Video 2 [online], which displays the procedure of blepharoplasty.) As a result, the skin and orbicularis oculi can move as a unit. More extensive scar adherence can provide stable fixation.² All patients were satisfied with the outcome of upper blepharoplasty. Figure 1 shows a patient who received blepharoplasty.

Based on these doubts and results, stable blepharoplasty relies on two conditions. First, the tissue below the incision must be kept moving, as a unit. If the aponeurosis of the levator is loose, suturing the skin to the aponeurosis can easily cause narrow lid crease width and a puffy appearance after surgery. Keeping the skin-orbicularis oculi-tarsal plate as a unit can solve this problem. Second, when the upper eyelid rises to a certain height, the skin, together with tarsal, moves posterosuperiorly and the tissues on both sides of the incision move in different directions, under the action of the incision suture or scar. In patients with severe depression of the upper eyelid, it is difficult to produce this difference in direction, so the double eyelid is also difficult to form. These two conditions are indispensable for the formation of double eyelids. Although these views still need theoretical support, the causes of lid crease formation need to be further discussed.

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DISCLOSURE

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

PATIENT CONSENT

Patients provided written consent for the use of their images.

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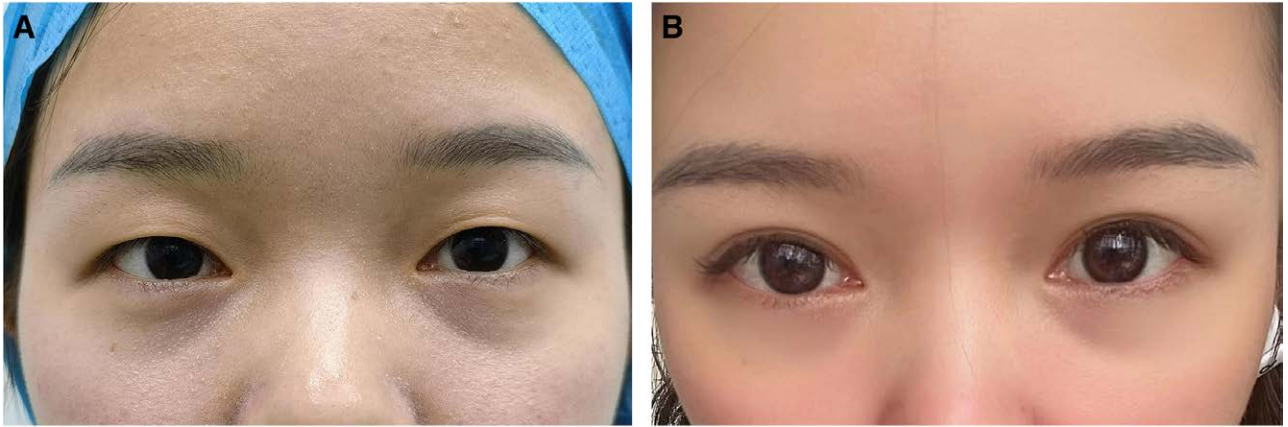


Fig. 1. Photographs of a 21-year-old female patient who received blepharoplasty. A, Preoperation. B, Six months after blepharoplasty.