Asian Facial Cosmetic Surgery

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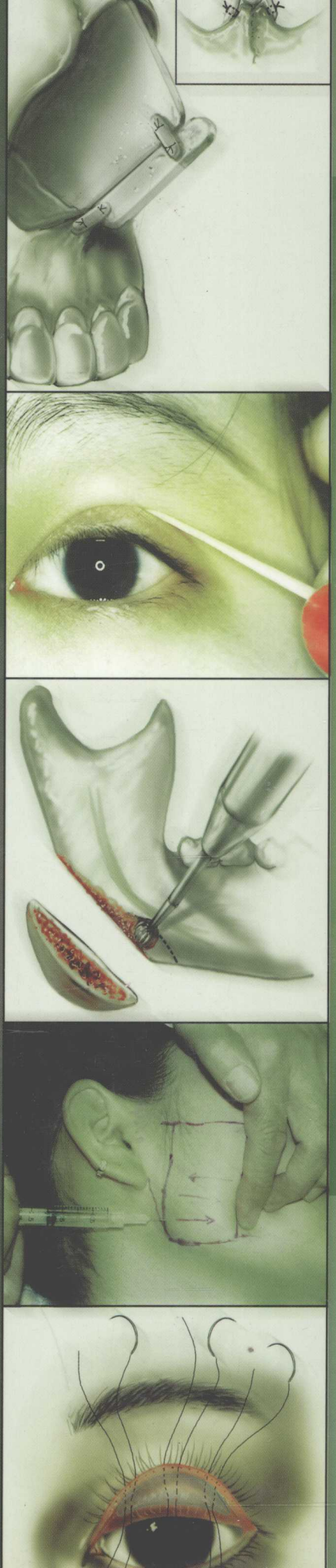

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Asian Facial Cosmetic Surgery

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Preface

ASIAN FACIAL COSMETIC SURGERY is intended as an introduction to Asian cosmetic surgery for the western plastic surgeon with a limited exposure to the Asian patient. Because of a steadily increasing influx of Asians immigrating to the United States, opportunities to deal with Asians are more common than in the past. Cosmetic surgery for the Asian patient is an entirely separate field of plastic surgery. Applying surgical principles for whites to Asians often produces unexpected, and sometimes even disastrous, results. The western ideal of beauty may not conform to the concepts of beauty nurtured by Asians. Despite the enormous cultural influence of the western media, there is an element of ethnic pride that perseveres through the search for the ideals of Asian beauty. On the other hand, there are plenty of surgical procedures that benefit Asians and that apply the exact same surgical principles used for white patients. *ASIAN FACIAL COSMETIC SURGERY* is limited to facial surgery simply because the face is what distinguishes Asians so much from whites. There are only a few books written in English that deal with Asian cosmetic surgery. Although the books teach the philosophical aspect of care for the Asian patient, surgical procedures are described rather casually and briefly. The illustrations and operative photographs are summarized rather than detailed. This book is designed for surgeons who are not familiar with the procedures described, and an atlas format is a perfect vehicle for this purpose. Any surgeon can follow the directions from the beginning to the recovery period in a step-by-step fashion. The authors took extra efforts to include every detail that the learning surgeon should know, going back to the first year of residency. Just as there is no ending in learning the depth of every surgical procedure, the chapters were reviewed again and again to guard against the omission of any aspect of the surgery that might benefit even well-informed surgeons.

Contributing authors from China, Japan, Korea, and The United States combine their regionally and culturally specific knowledge to create a rich pool of science and experience. This book represents the soul and sweat of the contributing authors, each of whom has performed and taught these procedures day after day for decades.

Acknowledgments

I would like to thank three people for ending my ten-plus years of procrastination in writing this book. My fellow, Ron Chao, MD, gave a prompt and tireless effort during the most critical period. Dong Hak Jung, MD, provided valuable advice and expertise to this undertaking. Rebecca Schmidt Gaertner, my editor of Elsevier, provided the opportunity and shared the vision of spreading the knowledge of Asian cosmetic surgery. I would like to thank all of the contributing authors and associate editor Dean Toriumi, MD, for their valuable contributions to this book, despite their busy practice and teaching schedules.

Many thanks go to Suzanne Flint for her day-to-day collaboration in completing this book. My deep appreciation goes to my sons, Min S. Park, MD, and Kyu S. Park, MD, for their unpaid contribution in reviewing the manuscripts. No words could express my thanks to my wife, Young Yong, who provided unwavering support during the two years I was preoccupied editing this book.

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Asian Blepharoplasty

1 Introduction to Asian Blepharoplasty

Jung I. Park

Blepharoplasty in Asia is almost synonymous with the double eyelid operation. The double eyelid operation technique has come full circle since it was first described by the Japanese surgeon Mikamo,[1] who reported a suture technique in 1896 (Figure 1-1). In 1929 Maruo[2] was the first to describe the incision technique (Figure 1-2). In 1939 Hayashi[3] introduced the technique of excising a strip of orbicularis oculi muscle (Figure 1-3), 15 years before Sayoc[4] published his widely quoted paper in 1954 (Figure 1-4). Mitsui[5] ventured further in 1950 by excising the muscle, connective tissue, and fat in the pretarsal area (Figure 1-5). In 1960 Fernandez[6] reported the most radical approach

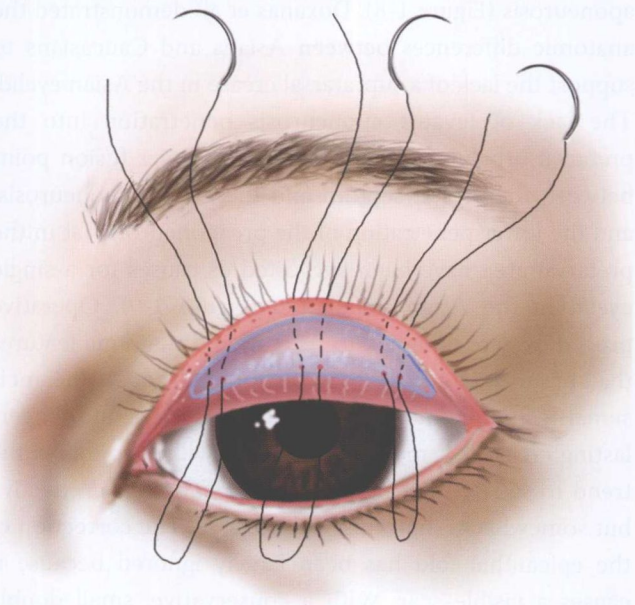
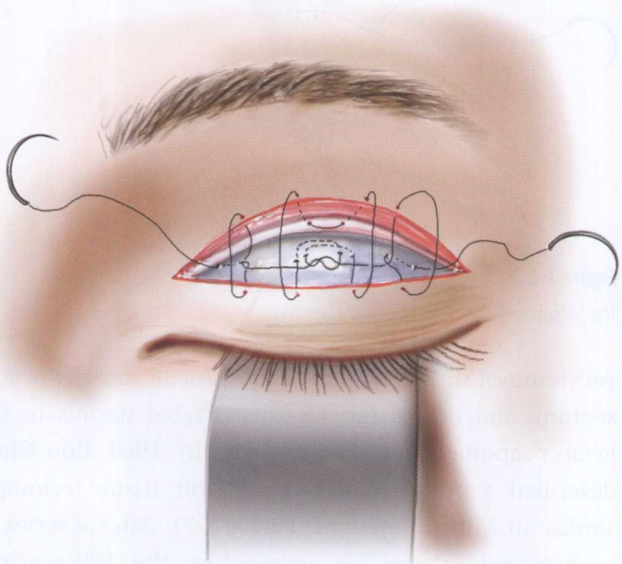


Figure 1-1
The Mikamo method.



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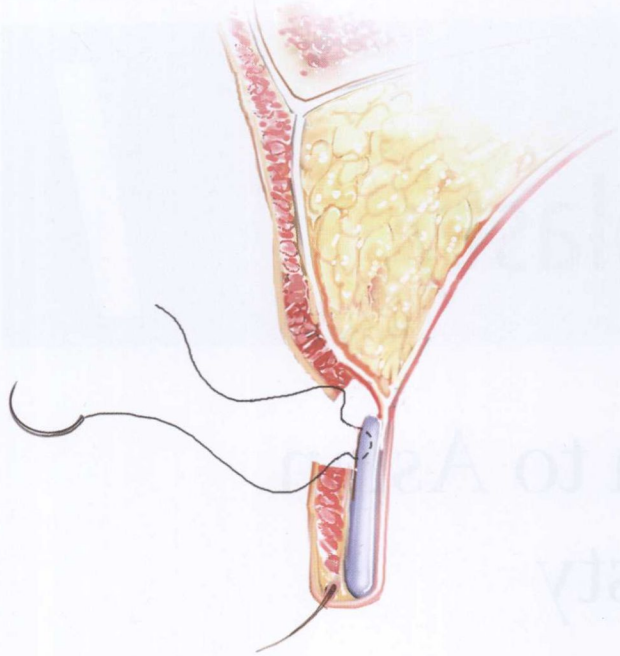
The Maruo method.



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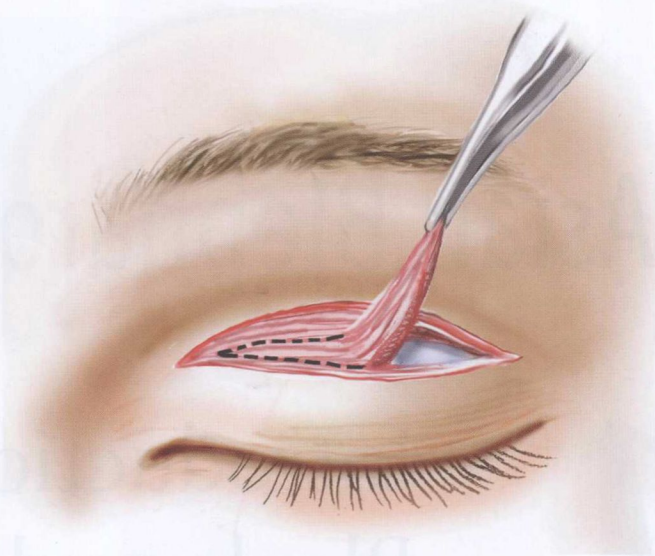
The Hayashi method.



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The Sayoc method.

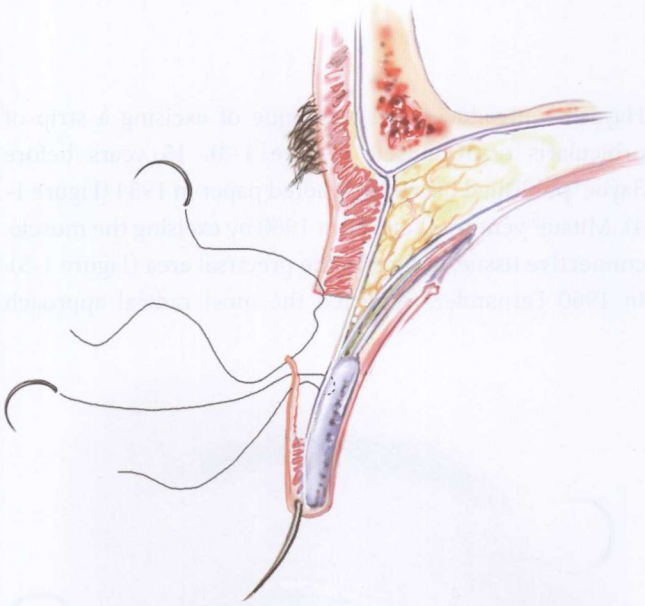

Figure 1-5
The Mitsui method.

yet: removal of the skin, orbicularis oculi muscle, orbital septum, and orbital fat. He then fixated dermis to the levator aponeurosis (Figure 1-6). In 1963 Boo-Chai[7] described a pretarsal and orbital soft tissue technique similar to Mitsui's method (Figure 1-7). After a series of progressively aggressive approaches, the 100-year-old suture technique is again favored by clinicians in East Asian countries.

Preferences for the Asian eyelid have changed with time, from a mild traditional-looking double fold to an aggressive wide fold and then back to a scarless, conservative double eyelid. The choice of suture material has not drawn as much attention; surgeons have preferred to use absorbable catgut or removable or permanent sutures. In the incisional technique, tissues are fixated between the skin and the tarsus or levator aponeurosis. In 1999 Park[8] reported a technique using the orbicularis oculi muscle (rather than the skin) as the tissue that fixates to the levator aponeurosis (Figure 1-8). Doxanas et al[9] demonstrated the anatomic differences between Asians and Caucasians to support the lack of a supratarsal crease in the Asian eyelid. The lack of levator aponeurosis penetration into the pretarsal orbicularis oculi muscle, the lower fusion point between the orbital septum and the levator aponeurosis, and the lower penetration of the preaponeurotic fat in the pretarsal area have been suggested as causes for a single eyelid in the Asian population (Figure 1-9). Operative procedures are designed to recreate the anatomic features that produce the double eyelid fold. Although the incisional technique may give a more distinctive and longer-lasting crease,[10-15] more surgeons are willing to follow the trend to satisfy their patients with a simple and effective but somewhat compromised procedure. The correction of the epicanthal fold has been largely ignored because it causes a visible scar. With a conservative, small double eyelid formation, the average-sized epicanthal fold does not diminish the cosmetic improvement of the double

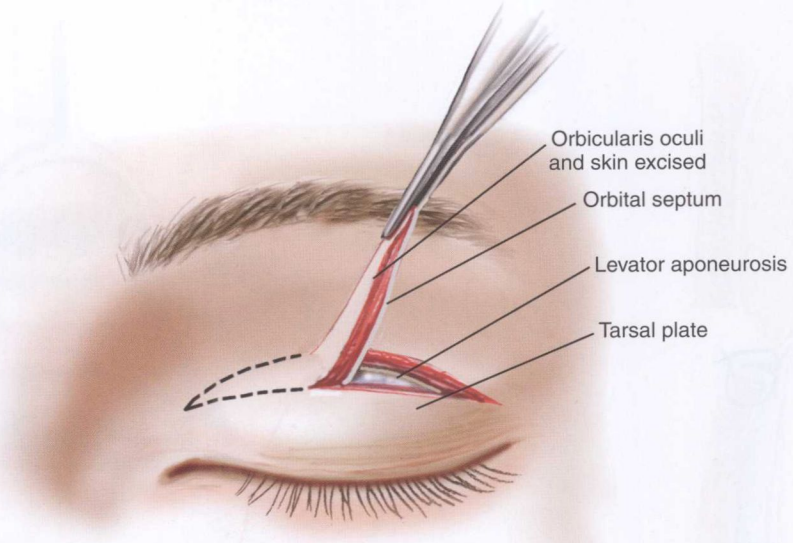

Figure 1-6
The Fernandez method.

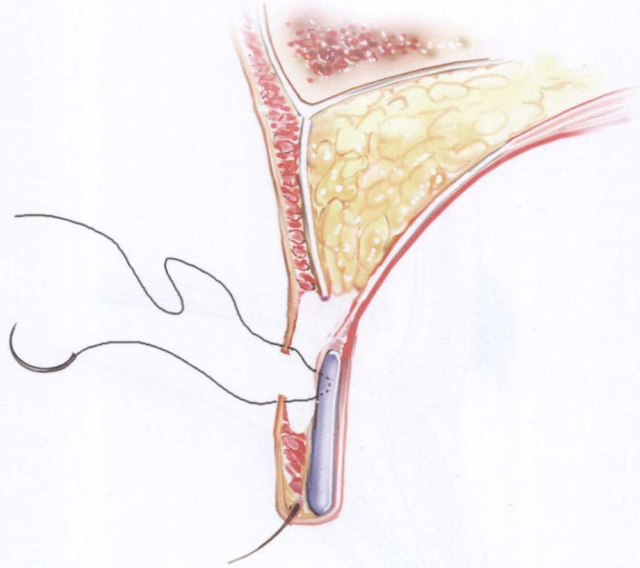

Figure 1-7
The Boo-Chai method.

eyelid surgery. As the double eyelid operation becomes more aggressive, the presence of the epicanthal fold becomes more visible (Figure 1-10); at times, it gives the appearance of a round eye (Figure 1-11). More importantly, public desire for surgical enlargement of the eyes has caused surgeons to seek better techniques to eliminate the epicanthal fold. Variations of direct excision, V-Y advancement, W-plasty, and Z-plasty techniques have been published. Despite the numerous methods available, many surgeons are reluctant to perform the medial epicanthoplasty because of the potential for visible scar formation. The popularity of scarless surgery also diminished the demand for the procedure. However, it cannot be denied that a well-executed epicanthoplasty adds significant beauty to the eyelid without visible scarring. Some surgeons perform lateral canthotomy/canthoplasty in an attempt to enlarge the eyes.

The older Asian patient presents an entirely different set of aesthetic challenges for the surgeon. In addition to creating the double eyelid, the surgeon must be concerned with redundancy of the eyelid skin. The fullness of the upper eyelid secondary to brow ptosis adds to the complexity of upper eyelid surgery on the older Asian patient. These patients have reluctantly accepted unsightly and prolonged upper lid edema and puffiness after double eyelid surgery (Figure 1-12). These problems stem from the excision of large amounts of thin pretarsal skin and the creation of a fold in which the remaining eyelid skin is much thicker and closer to the eyebrow. A forehead lift resolves this issue adequately; the thicker brow skin is pulled up and out of the way, and the thinner pretarsal skin is used to create a more delicate double eyelid fold (Figure 1-13). The forehead lift for the older Asian patient has an additional purpose: to prevent an unwanted thicker postoperative double eyelid fold. Patients often have to be persuaded of the benefits of this procedure and encouraged to accept it.

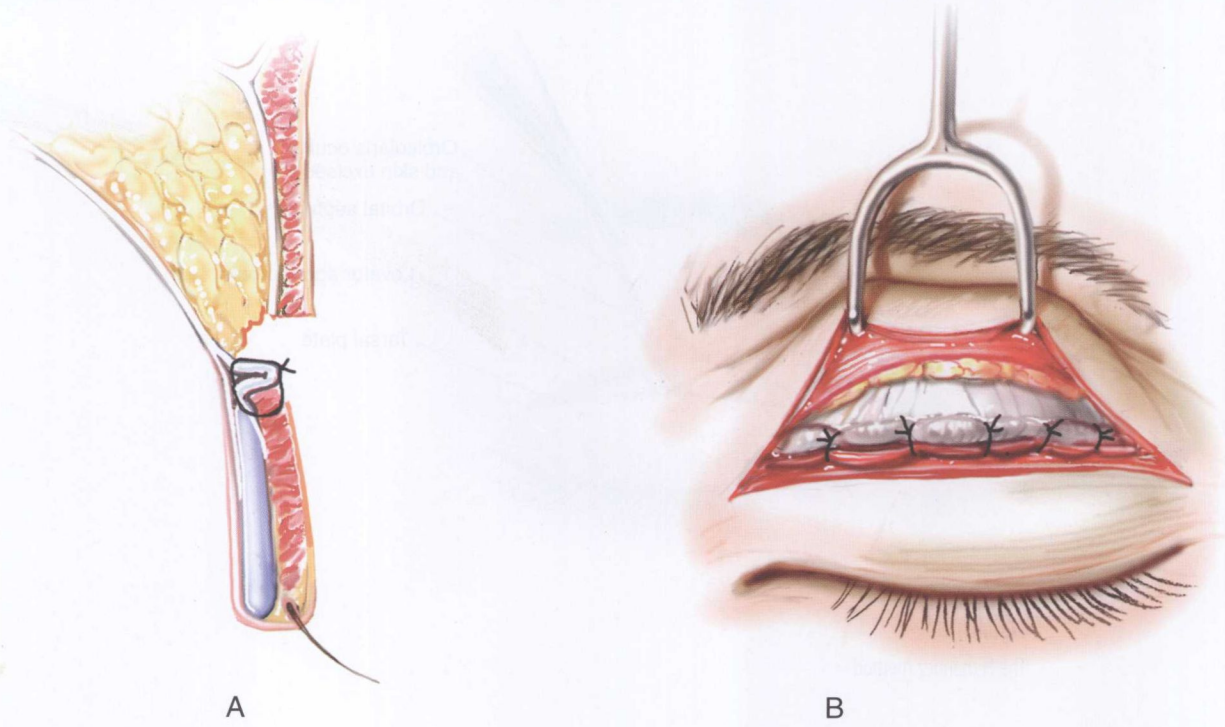

Figure 1-8
The Park method. **A,** Cross-section view. **B,** Operative view.

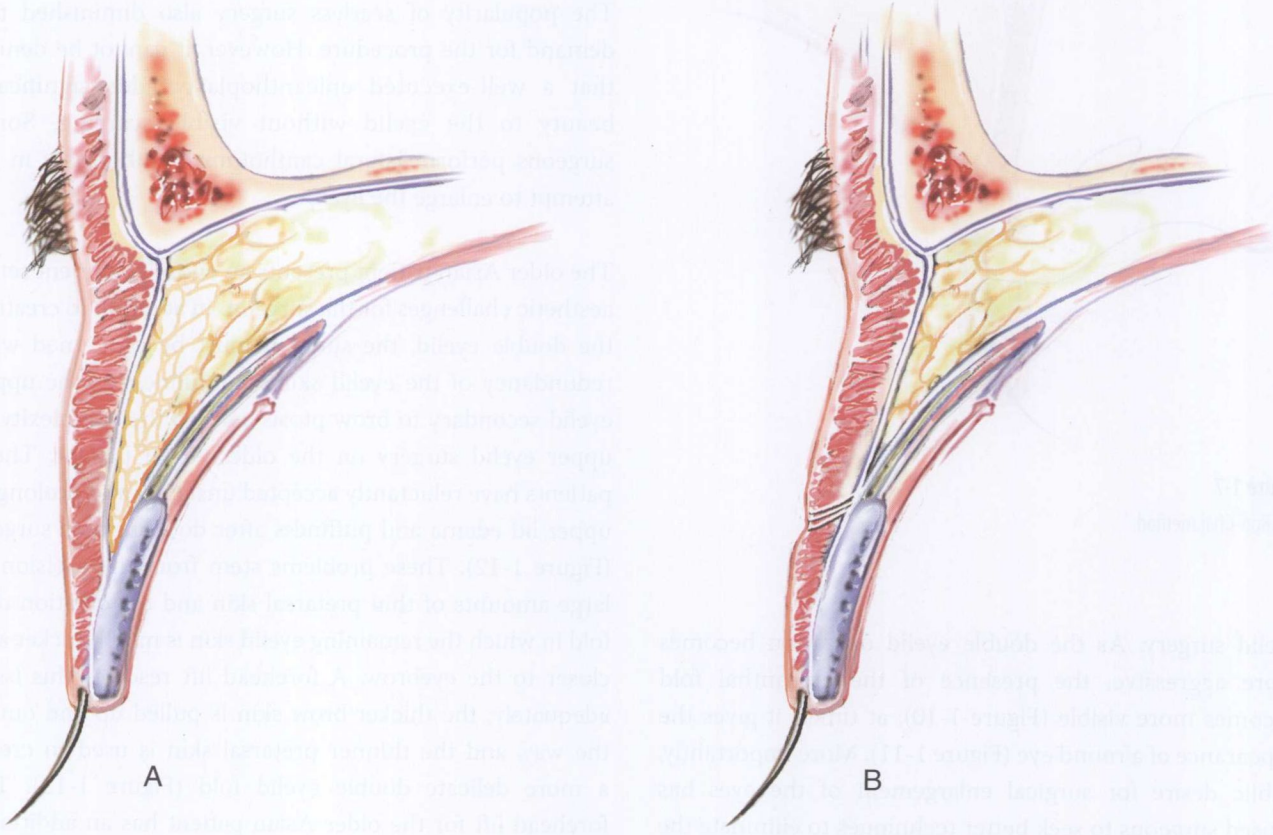

Figure 1-9
A, Cross-section view of the Asian eyelid, demonstrating that the orbital septum fuses with the lelvator aponeurosis below the superior tarsal border. **B,** Cross-section view of the Caucasian eyelid.

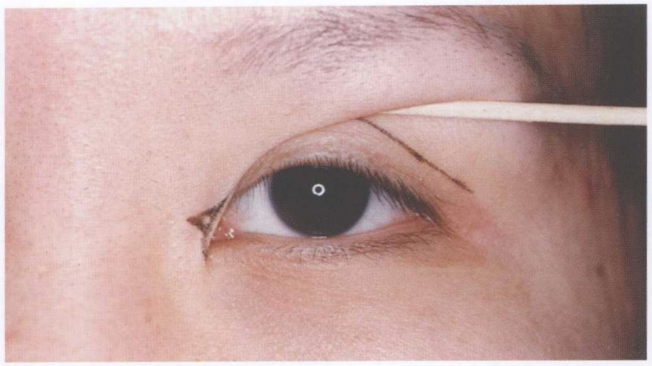

Figure 1-10
Creation of the double eyelid crease accentuates the presence of the epicanthal fold.

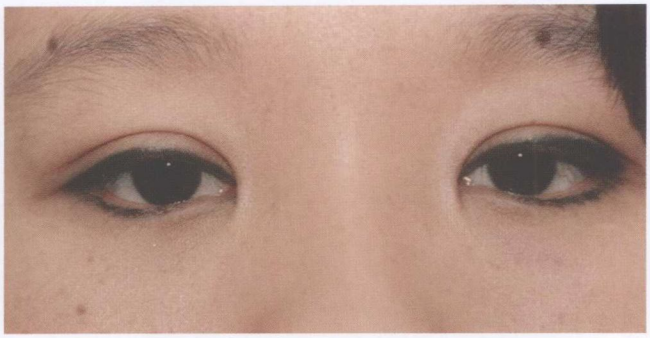

Figure 1-11
The eyes appear round because the epicanthal fold and high double eyelid fold are present.

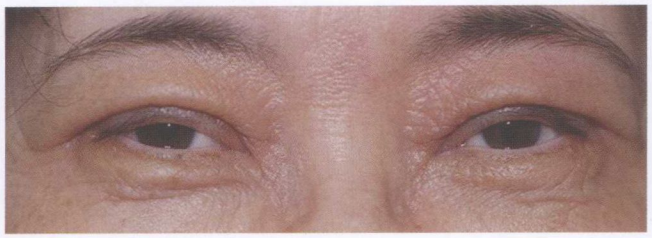

Figure 1-12
The postoperative double eyelid fold in this older woman appears thick and unnatural.

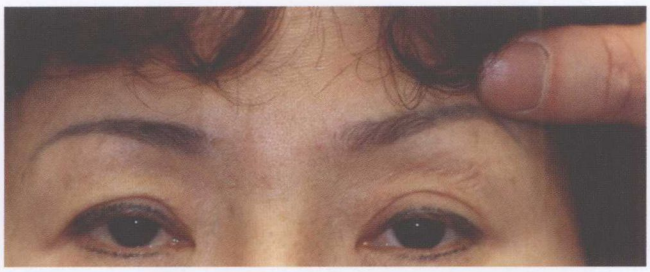

Figure 1-13
The finger can be used to simulate a brow lift and demonstrate a favorable effect on the double eyelid fold. Thinning of the left double eyelid fold is evident.

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2 Single Suture Technique

Kazuo Sato*

In recent years, patients and surgeons have preferred the buried suture method because it involves a short downtime and causes no scarring. When the author began using the single suture method in 1988, the downtime was long and the swelling lasted approximately 3 weeks. Since then, great advances have been made in this method. The procedure simplified, and swelling and subcutaneous bleeding have been drastically reduced. Recent buried suture methods have adopted many improvements that have significantly reduced the incidence of loss of the double eyelid. Three different methods for the single suture technique are available.

Single Suture Method (Eye Makeup Method)

Transcutaneous Ligation

See Figure 2-1.

1. *Skin–levator muscle ligation method:* The levator and Müller's muscle are ligated with the skin at the upper margin of the tarsus. The sling technique is the most representative method.
2. *Skin-tarsus ligation method:* This method is simple and provides satisfactory fixation. Possible drawbacks include potential corneal erosion, impingement of the subconjunctival capillary flow, and deformity of the tarsus.

Transconjunctival Ligation

This method is difficult and requires considerable experience. It is also difficult to remove the sutures.

At present, the author uses the skin–levator muscle ligation method. The term *"eye makeup method"* is used because this method induces so little swelling that patients feel as though only eye makeup has been applied.

Single Suture Method with Orbital Fat Removal (Eye Shape-up Method)

Inner and outer orbital fat is removed through a small opening at the outer margin, which has been prepared for

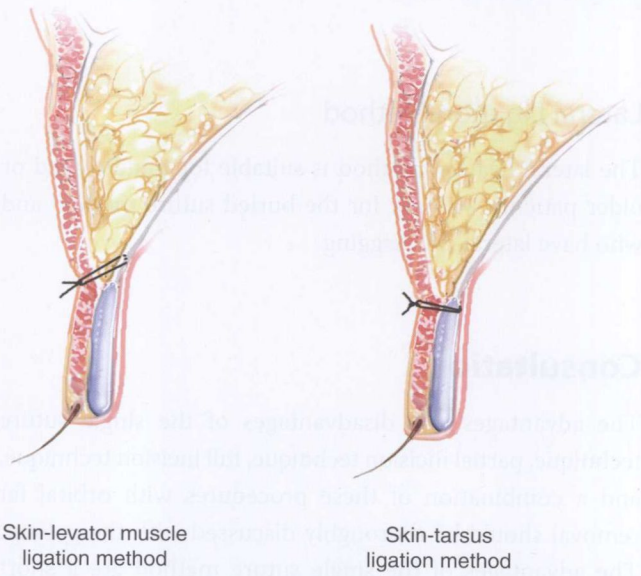

Figure 2-1

Comparison of the skin–levator muscle ligation and the skin-tarsus ligation method.

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