Mini-incision lower lid blepharoplasty reduces postoperative complications

The procedure reduces potential complications and allows a faster recovery.

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The strategy in lower lid blepharoplasty is to remove the herniated orbital fat without adversely altering the shape and contour of the lid fissure, to avoid any potential complication and to allow a faster recovery for the patient.

The transconjunctival approach to lower lid blepharoplasty has gained a lot of popularity. This is partly due to a greater awareness of the potential complications by the patients involved.

"The strategy in lower lid blepharoplasty is to remove the herniated orbital fat without adversely altering the shape and contour of the lid fissure..."
— Chedly Bouzouaya, MD

ed in aesthetic surgery and partly because the number of patients who are interested in having blepharoplasty is increasing. Moreover, patients now request blepharoplasty at an earlier age.

Historically, the transcutaneous approach has been the surgical technique of choice to resect herniated fat, resulting sometimes in lower lid ectropion, noticeable scars and lower lid retraction. The latter is the most common and dreaded complication of the transcutaneous lower lid blepharoplasty.

The transconjunctival technique was first described in 1924 by Bouquet. This approach was popularized by Tessier, who used the conjunctival approach to the orbital floor and maxilla in congenital malformation and trauma.

The traditional conjunctival approach— with incision extending from the punctum to the lateral canthus—can result in complications including cicatricial ectropion, lower lid retraction, canthal dehiscence, canthal laceration, buttonhole laceration of lower lid and conjunctival prolapse of chemosis.

In this era of endoscopic surgery, mini-incision cataract surgery and...
Blepharoplasty

(continued from page 10)
wood's suspensory ligament. The capsu-
lopalpebral fascia inserts onto the inferi-
or tarsal border and sends strands to the
inferior coosynaptic fornix, the suspen-
sory ligament of the fornix.

The orbital septum — a multilayered
tissue sheet of fibrous tissue — arises from
the periorbicular fascia at or below the
inferior tarsal border. In transconjunc-
tival blepharoplasty, the entrance into the
orbital fat is made posterior to the
orbital septum. Therefore, the anterior
lamella is not violated.

Technique

The instrument used for this tech-
nique is the Dual Frequency unit with
foot switch assembly (Elman International). The radiomas of the unit delivers
high frequency waves at 4 MHz, the
optimal frequency to cut soft tissue, as
was investigated decades ago. The El-
man Dual Frequency has the capacity to
deliver a variety of waveforms. The one
used for blepharoplasty is the fully recti-
curved wave, which is 50% cutting and
50% hemostasis. The A3 electrode of the
TEE 301 Microincision Empire Needle
electrode for transconjunctival approach
is used.

The anesthesia is performed by infil-
tration of the fornix with 2 to 3 mL of 2%
lidocaine with 1:200,000 epinephrine. A
lid plate is placed, achieving protection
for the globe and helping the orbital fat
in herniation. The fornix is exposed, and
an incision through conjunctiva and
retractors is made at the lower border of
the tarsal plate for both medial, central
and lateral fat (if a lateral fat prolapse has
been assessed preoperatively).

Using the newly designed lid retac-
tor, the lower lid is retracted on its full
length, allowing a nice exposure of the
whole surgical field of fat prolapse and a
very good visualization of any bleeding. The
"Cheeky lid retractor" is insulated with a
reflective surface and is safe to use with
the radiomas of the unit of the CO2
laser.

With the lid plate pressure applied
on the globe, the fat pad is teased out,
held with a forceps and resected, using
the radiomas unit.

The fat is easily resected, and if there
is any bleeding, it is easily controlled by
simply grasping the bleeding tissue
with the forceps and touching it with
the electrode. There is no need to
change instruments or to clamp the fat
with a hemostat across its base before
resecting and cauterizing the fat
stump as done traditionally.

The amount of fat to be removed is
assessed for the central, nasal and lateral
fat pockets preoperatively and is helped
by the surgeon's experience.

There is no need for sutures. A com-
bination of antibiotics and steroids is
placed in the fornix, and ice packs are
placed on the closed eyes.

Discussion

In cosmetic surgery, and cosmetic
eyelid surgery in particular, the surgeon
must reach excellence in his or her
results. Therefore, blepharoplasty needs
to be performed with extreme caution
by a well-trained surgeon who is familiar
with the eyelid anatomy, thus avoiding
complications and poor results and
allowing the patient a fast recovery.

The mini-incision transconjunctival
blepharoplasty helps achieve these
goals. The technique has been used for
the past 5 years. The newly designed lid
retractor helps the exposure and facil-
itates the procedure. The standard and
traditional lower lid blepharoplasty with
incision from the punctum to the lateral
canthal angle with almost a total des-
insertion of the lower lid retractors could
result in lower lid ectropion, lower lid
retraction, conjunctival prolapse, injury
to the canicular system and injury to the
inferior oblique muscle.

With the mini-incision transconjunc-
tival lower lid blepharoplasty, these
complications are avoided, and the
recovery is very fast with minimal
swelling and ecchymosis. The patient can
be in or his or her office on the third
day after the surgery. This is due to the
minimal trauma caused by the technique
but also to the use of the radiomas unit,
which allows us — with quick, light,
smooth strokes — to make a fine incision
and bloodless fat resection without clus-
tering, with minimal lateral lid spread or
collateral tissue damage.

Conclusion

In cosmetic eyelid surgery, there is no
tolerance for error or complications.
Patient selection, thorough evaluation of
the deformity and an accurate surgical
procedure with the proper instrumentation
are keys to obtaining an optimal
result.