Special Topic

Tips to Prevent Complications with Transconjunctival Blepharoplasty

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Transconjunctival blepharoplasty is a commonly performed procedure. Corneal protection, avoidance of damage to the inferior oblique muscle of the eye, avoidance of hemorrhage from the fat pads, and adequate fat removal are important considerations when transconjunctival blepharoplasty is performed. The described surgical technique provides consistently satisfactory results and avoids the use of cumbersome corneal protectors.

Transconjunctival blepharoplasty has gained in popularity in the past few years. Surgeons performing this procedure are acutely aware of the pitfalls associated with this very useful clinical procedure—notably, corneal damage, injury to the inferior oblique muscle, and removal of an excessive amount of orbital fat. My technique prevents these complications, and the basic steps are easy to perform.

Introduction

Corneal protectors are usually used during a transconjunctival blepharoplasty. However, in my experience I have found them bothersome because they compromise the space between the globe and lower lid. Many of the blepharoplasties that I perform are done with the patient under local anesthesia, and even with local anesthetic eyedrops and intravenous sedation, certain patients find it difficult to tolerate corneal protectors. In my view, the conjunctiva can serve as a corneal protector.

Technique

The lower eyelid margin and the conjunctiva to be incised are first infiltrated with local anaesthetic solution containing epinephrine. Topical anesthetic drops are also placed in the eye. A 5/0 black silk suture is placed through the tarsal plate 2 mm below the eyelashes and used as a retracting suture. The transconjunctival incision is then made with a number 15 blade in the desired position depending on the location of the fat pads.

The tarsal border of the conjunctival incision is then transfixed with a second silk stay suture incorporating the lower edge of the upper focal conjunctival segments with the lower eyelid skin margin. Both sutures are then held with a small hemostat. This maneuver provides excellent control over the lower border of conjunctiva and lower eyelid margin. After this another silk stay suture is passed through the upper margin of the lower conjunctival segment and gently elevated by the surgical assistant to completely cover the cornea. Even in patients in whom upper blepharoplasty has been performed.
Local anesthetic with epinephrine is infiltrated into the tarsal plate and conjunctiva.

Lower lid is retracted and conjunctiva incised with a number 15 blade.

Both margins of conjunctiva are retracted delivering fat towards the surgeon. The cornea is fully protected by the upper conjunctival flap margin of the lower conjunctival flap.

Lower fat pad removed with a carbon dioxide laser.

Gentle upward traction on both these stay sutures has the effect of delivering the operative field toward the surgeon. Gentle dissection delivers the fat to a point that is very easily accessible. Directing the field toward the surgeon in the manner described shifts the fat away from the inferior oblique muscle. I prefer using the carbon dioxide laser to remove fat. This technique is well tolerated by patients under conscious sedation, because there is no need to apply a hemostat to the fat pad before its removal. At the completion of the procedure, I do not suture the conjunctiva, but the application of a suitable antibiotic eye ointment is worthwhile.

Discussion

The described technique is well tolerated by the sedated patient, produces full protection of the cornea, delivers the fat toward the surgeon and away from the inferior oblique muscle, and provides excellent visibility and control. Protective corneal shields are not required, thus allowing the surgeon more space to perform the operation.