

Oculoplastics

Preop exams by ophthalmologists urged before oculoplastic surgery

The goal is to identify the potential threats that could jeopardize both the aesthetic result and the functionality of the eye, specialist says.

By Michela Cimberle

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MILAN – Preoperative evaluation by an ophthalmologist is strongly advised when oculoplasty is performed by a plastic surgeon, according to a specialist.

“Too often, in the past, patients were sent to us after surgery, seeking help for complications which could have been avoided if we had had the chance to see them before the operation. Now, plastic surgeons are more aware of the need to cooperate with us, for safety and best results,” Claudio Lucchini, MD, head of the Vista Vision clinic here, told *Ocular Surgery News*.

Evaluating physiological anomalies

In preparation for blepharoplasty, an evaluation of the eyelid functional motility is mandatory, Dr. Lucchini said.



**Claudio
Lucchini**

“Often, what makes the patient seek help from a plastic surgeon is more of a functional than a cosmetic problem. Conditions of altered functional motility may result in palpebral ptosis, and this is the issue that must be primarily addressed. The aesthetic and the functional problem must both be treated at the same time, or else results will be disappointing,” he said.

Brow position is also important. An eyebrow that has gradually lowered over the years creates the impression that the upper eyelid has excess skin. If the surgeon removes just this skin, without lifting the eyebrow at the same time, the cosmetic appearance could be worse than before surgery, resulting in a “Neanderthal” look, because there is not enough distance between eyebrow and eyelid, Dr. Lucchini said.

The presence of Bell's phenomenon should also be evaluated before superior blepharoplasty. "Bell's phenomenon is the normal outward and upward rotation of the eyes that occurs when the eyelids are closed. In our sleep, this phenomenon allows the cornea to be protected from any involuntary friction or contact with the air, in case of incomplete eyelid closure," he said.

However, in a minor percentage of patients, this physiological mechanism might not be present, and this can be the cause of problems in the early postoperative period.

The healing and scarring processes that take place after surgery cause traction and do not allow the eyelids to close properly, particularly during the night. The cornea is therefore continuously exposed, causing severe discomfort for the patient, Dr. Lucchini said.

Frontalis muscle activity should also be checked because, in some cases, this muscle compensates for a loss in eyelid functional motility and may mask a palpebral ptosis.

Other important aspects to verify are the presence of lesions of the seventh cranial nerve, abnormal eye movements and the laxity of canthal ligaments, he said.

This latter problem is often at the origin of a scleral show, with consequent exposure of the inferior part of the eye, and imposes some changes in the surgical strategy.

"The surgeon should perform not only an inferior blepharoplasty but also a canthoplasty or canthopexy to make sure that the inferior eyelid is lifted and maintained in a more elevated position, thus avoiding scleral exposure and therefore problems like dry eye and corneal damage," Dr. Lucchini said.

Exophthalmia, as well as palpebral or orbital alteration in Basedow's disease patients, should also be evaluated.

Assessing vision and tear film integrity

Dr. Lucchini said plastic surgeons who operate on the eye should evaluate the patient's visual function, even in simple ways such as covering, in turn, one of the patient's eyes and asking him or her to look at distant objects. In cases of evident or suspected visual defects, a more professional evaluation by an ophthalmologist is advisable.

"Evaluating and documenting preoperative vision protects the surgeon from any medical-legal accusation of having compromised the patient's visual function," he said.

Tear film integrity should also be assessed, taking into account that about 20% of the population in Europe and the United States suffer from some kind of tear film alteration because of contact lens use, allergies or systemic disorders such as Sjögren's syndrome.

“Tear film dysfunction is one of the most common causes of patient dissatisfaction or discomfort following eyelid surgery,” Dr. Lucchini said. “Patients often complain of dry eyes and burning sensations. This most often comes from a preoperative alteration of the tear film, which has been worsened or made symptomatic by the operation because, for some time after surgery, the eyes don’t close properly.”

A Schirmer’s test performed preoperatively will show if the tear production is normal, and the patient’s history will provide additional information on potential causes of tear film alterations.

“Patients who are taking antidepressants or benzodiazepines ... may have alterations, both in the quantity and quality of tears,” he said.

Also, contact lens wearers, particularly those who show signs of contact lens intolerance, are likely to have an abnormal tear secretion.

In patients who have previously undergone corneal refractive surgery, whether surface ablation or LASIK, tear production is altered for 1 year or more after the treatment, Dr. Lucchini said.

“These are not necessarily exclusion criteria, but just a warning that some problems may occur over the first weeks following oculoplasty. Patients should be made aware of this possibility before they sign their consent,” he said.

The risk of angle closure

Patients with ocular pathologies should always be referred to an ophthalmologist before any decision concerning aesthetic surgery is made, as should those who have recently undergone cataract or glaucoma surgery, Dr. Lucchini said.

“If there is a filtering bleb at 12 o’clock, which is the area where the aesthetic surgeon does most of its maneuvers, there is a risk of creating some damage and decreasing the efficiency of this delicate drainage system, with severe consequences on the patient’s eye,” he said.

One aspect that is often underestimated is that high hyperopic or high astigmatic patients may have problems that necessitate evaluation by an ophthalmologist before any aesthetic eye surgery is performed.

Often, these patients suffer from chronic or recurrent blepharitis or blepharoconjunctivitis, which increases the risk of infection during surgery, Dr. Lucchini said.

In addition, high hyperopic patients have small eyes with a shallow anterior chamber and therefore a smaller iridocorneal angle.

“There are documented cases of acute glaucoma attacks during blepharoplasty in high

hyperopic eyes,” he said.

The sudden pupil dilation induced by the adrenalin, which is used in combination with the topical anesthetic to reduce bleeding, may cause angle blockage in these small eyes and therefore a sudden increase in IOP, Dr. Lucchini said.

“The patient experiences a sudden visual loss, acute pain in the eye, nausea and vomiting. It is a severe condition that should never be underestimated and requires prompt intervention. An ophthalmologist should see the patient as soon as possible and, in the meantime, the plastic surgeon should stop the operation and administer hypotonic drugs to rapidly lower the pressure,” he said.

Although few plastic surgeons have pressure-lowering eye drops, systemic medications such as acetazolamide are normally available in any operating room, Dr. Lucchini said.

Infection prevention

The condition of the eyelid, including the internal surface and the margins, should be carefully evaluated using a magnifying lens to detect potential sources of later complications, Dr. Lucchini said.

A careful evaluation for any sign of bacterial infection during surgery, such as excessive lacrimation and reddening of the palpebral rim or conjunctival fornix, should be done.

The presence of staphylococci can be revealed by multiple or recurrent chalazia and hordeola. Follicular infections of the palpebral rim can manifest themselves as soreness, erythema, edema, pustules or ulcers, he said.

“Infectious diseases should be diagnosed by an ophthalmologist and mandatorily treated before surgery, as they can cause numerous problems. I had a patient who came to my office with severe ocular pain and photophobia following oculoplasty. He had bilateral corneal ulcers caused by staphylococcus exotoxin. Such a severe complication could have been prevented by managing the infection before surgery,” Dr. Lucchini said.

To reduce the periocular and ocular surface flora, he suggested an antiseptis with betadine, on and around the eyelids, and a couple of drops of povidone iodine in the conjunctival sac.

“We routinely use povidone iodine 5% for anterior segment surgery. Blepharoplasty is not an intraocular procedure, but this simple precaution provides the extra safety of a thoroughly disinfected operating field,” he said.

Cooperation rather than competition

Oculoplasty as a subspecialty of ophthalmology has been growing in recent years. In Europe, however, plastic surgeons are still the first choice for the majority of patients who aim at an aesthetic goal, Dr. Lucchini said.

“Not many people are aware that they can find an at least equally good and certainly more specialized answer to their needs by consulting one of us,” he said.

“It is mainly our fault because we have mainly limited our field to reconstructive surgery, and for too long, we have delegated oculoplasty to plastic surgeons,” Dr. Lucchini said.

However, “who does it is not so important. What really matters is that it is done well. And to do it well, we must take into account that oculoplasty may be primarily aesthetic surgery, but the function of the eye must be mandatorily protected and preserved,” he said.

Cooperation rather than competition is the key to successful results, and this awareness is growing among ophthalmologists, plastic surgeons and dermatologists.

“In Milan, we have managed to combine the three subspecialties and work synergistically as a successful team,” he said.

At the Vista Vision center, Dr. Lucchini periodically organizes courses and seminars aimed at the specialists of all three branches.

“Through these interdisciplinary symposia and through the personal contacts between participants, we have the opportunity to exchange ideas and experiences, learn a lot and offer the best service to our patients,” he said.

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