AVOIDING COMPLICATIONS IN COSMETIC FACIAL SURGERY

Complications come in a variety of presentations. Most can be avoided or handled with the right procedures in place.

BY JOE NIAMTU, III, DMD

Joe Niamtu, III, DMD is a cosmetic facial surgeon in Midlothian, VA. He lectures internationally on cosmetic facial surgery and has taught on six continents around the world. He has written four textbooks as well as 30 chapters for other textbooks. He has authored hundreds of publications on various cosmetic facial topics and a cosmetic facial surgery DVD series.

Complications are a part of surgery, and the only surgeons without them are those who don’t operate. Although no one brags about complications, it should be a topic of open discussion as it is both a learning and teaching process. It is said that if one practices long enough he or she will see it all.

Complications can be relatively benign and manifest as delayed healing or they can be horrific, leading to lawsuit, disfigurement, disability, and death. Sometimes bad things happen to good doctors but many complications can be avoided by learning from your own problems. An open forum for sharing complications is one of the most valuable teaching tools, especially for novice surgeons.

“PROCEDURAL” COMPLICATIONS

It is said, tongue in cheek, that the most dangerous time to have surgery is right after an annual meeting! There may be some truth in that as annual meetings are forums for unveiling new techniques and technologies. It is the novice surgeon that is most at risk for “post annual meeting complications” due to their naïveté. More seasoned surgeons have developed a procedural skepticism. Procedural skepticism is not a bad thing; it serves as a filter for frivolous treatments or technologies. I often tell patients, “Wait one year before doing a miracle procedure you see on TV.” Frequently, a year later no one is doing that procedure, because it was ineffective. It is great for doctors to stay on the cutting edge and evaluate all new procedures or technology with an open mind while searching for evidence-based support. Staying on the “bleeding edge” however, can be a slippery slope. I have seen the situation too many times where a doctor purchases a new machine that “delivers maximum results with minimum downtime and will drive patients to your door.” The doctor purchases the device, begins marketing “big results with no downtime or surgery” and his or her schedule becomes packed with new patients seeking this miracle treatment. The office is so busy with the new device and smiles are ear-to-ear. Then—about two to three months into the treatments—patients begin presenting to the office unhappy with the lack of the results they anticipated. Some want their money back, others will leave negative reviews and still others will never return to that office because they have lost trust. Now the doctor is stuck with negative marketing and a $150,000 device that is being used as a doorstop. This is a business complication.

OFFICE ACCREDITATION

Some may find it unusual that the topic of office accreditation finds a place in a complication article. Many doctors shy away from office accreditation because they fear the process. Many docs think that it means spending thousands of dollars on equipment and construction and many fear the added work required. Sixteen years ago I shared the same fears, but becoming a fully accredited office ambulatory surgery center was one of the best things I have ever done professionally, and I think it has avoided numerous complications.

BOTTOM LINE

Revision surgery is not sin. All surgeons should be conservative with skin and fat removal; you can always go back.
The three main credentialing bodies are the AAAHC, JCAHO and AAAASF. Achieving credentialing is more an exercise in governance and paperwork than in knocking down walls (Figure 1). The goal of office accreditation is to create and follow standard of care procedures and policies while performing evidence based studies within the practice. To become accredited, the office has to meet standards similar to hospitals in terms of policy and procedure, infection control, credentialing, etc. Basically it involves doing things that safe offices should be doing anyhow, but to become and remain accredited, you have to do it and prove it. Although this sounds intimidating, it is in reality a very helpful process to ensure quality care for maximum patient safety and the pursuit of predictable outcomes with reduced complications. Just being accredited does not prevent complications, but it does serve as a blueprint to keep the surgeon and staff on point to follow the highest standards of ambulatory surgery. It is also a tremendous marketing enhancement, as patients understand and appreciate accreditation standards. The good news is that the doctor has little involvement in the entire process other than understanding and implementing the process. The staff bears the brunt of the work. Having a single employee in charge of the process facilitates it.

INFORMED CONSENT

Most complications that occur with surgeries are routine in that they occur with a given procedure. These complications have been documented over the years and are actually predictable. For instance, in facelift surgery hematoma rates are about two to 10 percent, and greater auricular nerve injury is about one to seven percent while motor nerve injury is 0.3 to 2.6 percent. Surgeons who fall under or in these rates are average, but if a surgeon has multiple times an average percentage, something must be changed. Most complications eventually resolve, yet lawsuit remains a fear of all surgeons. In today’s legal climate even small complications can initiate legal proceedings. The first step in preventing complications is patient communication (Figure 2). Although an informed consent cannot prevent a complication, it can advise the patient of the frequency and severity of given problems. Too often surgeons don’t take sufficient time to discuss complications and merely gloss over them in a boiler plate document. Taking time for the surgeon and staff to review common and uncommon complications can go a long way with an unhappy patient if a complication occurs.

Besides my normal consent process I also have a document titled “What Your Procedure Won’t Do.” This can be effective in neutralizing unreasonable patients who claim that they would have never had the surgery if they realized that “this could happen.” The informed consent should be an active instrument and updated on a regular basis, as “new” pitfalls seem to perpetually evolve. “I thought I had seen it all until the patient did this or until this happened.” Informed consents should never sugarcoat or downplay potential problems. All my surgical consents include death as a complication and my filler consent includes blindness. There can be a fine line between complications and sequelae and patients have the right to understand.

TIME OUT

It is hard to believe that in the several thousand years of recorded surgery we have only recently gotten around to mandatory “time out” and site verification. If there is one simple way to avoid some complications it is with this presurgical pause (Figure 3). The entire team must stop and drop what they are doing and totally focus on the patient, their health history and allergies, medications, comorbidities, procedure, surgical site, and anesthetic implications. Time
Surgical Complications

The following is a discussion of several surgical complications that are usually easy to prevent but difficult to treat.

Blepharoplasty. One of the most dreaded complications from eyelid surgery is retrobulbar hematoma (RBH). Bleeding behind the eye can compress the retinal vessels or damage the optic nerve and cause blindness. Although the incidence is rare, it is a complication that requires emergent management. The incidence of RBH is 1:2,000 patients for bleeding and 1:10,000 for risk of permanent visual loss. Prevention of RBH includes preoperative, intraoperative, and post-operative measures by both the surgeon and patient.

Preoperatively, patients must discontinue medications that affect platelet function to decrease the chance of bleeding. Although this includes aspirin and similar medications, more and more patients are taking fish oil and herbal supplements such as Gingko that can affect coagulation and must be discontinued two weeks before surgery.

Intraoperatively, surgeons must be vigilant of potential bleeding, including muscle and vascular hemorrhage. Wearing loupes and a headlight greatly improves surgical vision. Using a coagulative modality such as radiowave surgery or CO₂ laser produces simultaneous incision and coagulation, which can reduce intraoperative bleeding to a miniscule amount (Figure 4). Postoperatively patients must not engage in strenuous activity or anything that produces a Valsalva maneuver and stimulates postoperative bleeding. Recently I was performing a preoperative consultation with a male patient who was getting ready to have blepharoplasty. He told me he was looking to the procedure as he will be off of work for a week and intends to drywall his garage! Needless to say, he and I were not on the same page.

Corneal damage is another potential complication during blepharoplasty surgery. Surgeons must always provide corneal protection (Figures 5, 6). It is sometimes easy to talk yourself out of using eye shields for a “quick and easy procedure.” That is usually when bad things occur. Insist that staff never allow any surgeon to deviate from proper protocol.

When performing blepharoplasty with radiowave or electrosurgical instruments, plastic shields must be utilized as not to conduct to the cornea. Stainless steel corneal shield should always be used with laser as plastic can be penetrated (Figure 6).

Facial Implants. The placement of cheek, chin and mandibular implants is common. One frequent complication by some surgeons is implant migration. Modern facial silicone implants are anatomic and constructed to fit over underlying bony anatomy. Although many implants remain in position, implants that migrate can produce aesthetic and functional problems.

Preventing implant migration begins with making the implant pocket dissection. The actual dissected area should be just large enough to accommodate the implant in a natural position. Making the pocket too big creates dead space which can contribute to movement. In addition to limiting the size of the dissection, screw fixa-
RATION IS THE MOST EFFECTIVE MEANS OF PREVENTING IMPLANT MIGRATION. SELF-DRILLING TITANIUM SCREWS CAN SECURE CHEEK IMPLANTS TO THE UNDERLYING BONE AND PREVENT MIGRATION (FIGURE 7). THE MORE DENSE CORTICAL BONE OF THE MANDIBLE REQUIRES DRILLING BEFORE SCREW PLACEMENT. I HAVE PERFORMED HUNDREDS OF FACIAL IMPLANTS AND NEVER EXPERIENCED MIGRATION WITH A SCREW FIXATED IMPLANT.

CERVICOFAcial Liposuction. Face and neck liposuction is a common and effective procedure. Although severe complications are rare, novice surgeons are more at risk for overtreatment and nerve damage. Liposuction is one of the first cosmetic facial procedures that many surgeons learn. Too often, fat becomes the enemy and overzealous treatment can lead to aesthetic and functional complications. All surgeons must realize that fat is a friend and not an enemy. Liposuction is better thought of as liposculpture. We are sculpting the regions, not making them devoid. The correct amount of fat in the right places is what produces the volume of youth. Over correction with skeletonization makes a patient look older instead of younger.

Several mm of subcutaneous fat must be left on the dermis to cushion and contour the neck. Removal of excessive fat will allow the dermis to approximate the platysma muscle which can create a tethered appearance in the neck that is very difficult correct (Download the Modern Aesthetics App to see Figures). Another common complication of novice surgeons is to over treat the subplatysmal fat. The average patient does not require subplatysmal fat reduction unless there is a distinct excess; Even then removal should be conservative. Over treatment of this area produces a “cobra deformity” (as in the hollow neck of a cobra snake) where a convex deformity is turned into a concave deformity that looks empty, hollow and aged.

CONCLUSION

All surgeons (especially novice surgeons) should operate conservatively with cosmetic procedures. Revision surgery is not sin and the mantra of all surgeons should be “be conservative with skin and fat removal as you can always go back and take away more.” It is much harder to put it back than it is to take it off.