From Medscape Plastic Surgery & Aesthetic Medicine

The Modern Cheek Lift: An Expert Interview With Brent Moelleken, MD

Pippa Wysong
Authors and Disclosures

Posted: 03/12/2010

Editor's Note:

The cheek lift is an ever-evolving procedure, with approaches becoming less invasive and less extensive. Brent Moelleken, MD, explains to Medscape readers how the cheek lift can lift the midface, why in many face-lift operations the midface can sag, and how newer approaches can redress this. Dr. Moelleken, Associate Clinical Professor of Plastic Surgery at the University of California at Los Angeles (UCLA), double board certified by the American Boards of Surgery and Plastic Surgery, spoke about the cheek lift with Medscape's Pippa Wysong.

Medscape: Today we're talking about cheek lifts. Could you start with some background?

Dr. Moelleken: Sure. The first cheek lifts were performed in the mid-1990s, and were subperiosteal. Cheek lifts were done through the lower eyelid down to the bone, lifting and anchoring up the tissues. In general, the intent of a cheek lift is to lift the midface. When the side of the face gets lifted with a face-lift, nothing happens to the middle of the face. For years, after face-lifts, patients had sagging in the middle, which gave a somewhat unnatural appearance. Cheek lifts address that.

Medscape: What other issues can a cheek lift address?

Dr. Moelleken: Often, when surgeons work on the lower eyelids, they make an incision below the lower eyelids, remove fat, and take a small amount of skin away from the corner of the eye. However, this causes a change in shape of the eye, making it appear rounded or pulled down on the sides. The cheek lift is a solution to that problem because it elevates the cheek tissue below the eye and anchors it up to prevent it from being pulled down while the lower lids are being done. I believe that this is the main reason to do a cheek lift. The lower eyelid is weak, and anything that you do to it causes it to pull down, although it can take months for this to occur. The result is a very characteristic appearance.

Medscape: You said earlier that cheek lifts were subperiosteal. Has this changed?

Dr. Moelleken: Yes, cheek lifts have evolved. Let me give you some background first. Sometimes you see temporary bulges below the eyes in people if they've eaten salty foods or have been crying. Bulges that are *always* there may be a sign of age or weakening of the orbital septum. However, we learned the hard way that sometimes complications can result from manipulation of the orbital septum. The orbital septum is a delicate layer that attaches the lower eyelid to the lower eye bone. When it contracts, it causes the eyelid to pull down -- sometimes severely in ectropion, an eversion of the lower eyelid.

Mild ectropion is just an alteration in the shape of the eye, but more severe cases lead to lateral orbital dystopia. Cheek lifts have evolved so that they are now accomplished at a more superficial, suborbicularis level. Rather than touching the orbital septum deeper down, if any modification of the fat is necessary, now it is typically done from *inside* the eye. The orbital septum can be completely avoided.

Another big advance is to use minimal incisions, which are very short and on the side of the eye. Cheek lifts are a subtle operation. If they are performed radically and large lifts are attempted through lower eyelid incisions, the risk is high that the eyes will distort in shape. Recently, the tendency has been toward more minimally invasive procedures, anchoring the muscle to the periosteum of the upper eyelid.

Medscape: Are there any tricks to anchoring the muscle?

Dr. Moelleken: Typically we use self-dissolving sutures. The theory is that if tissues are disconnected and anchored in a more superior position, they will fuse and permanent sutures are not necessary.

RELATED ARTICLES

News

Neck Muscle Graft Can Pump Up Lips

Articles

Function or Cosmesis -- What Is the Predominant Concern in Patients With Nasal Trauma Presenting for Rhinoplasty?

What Does Board-Certified Really Mean? An Expert Interview With James Wells, MD

Aesthetic Surgery Education and Research Foundation (ASERF) Elects New Officers: An Expert Interview With ASERF President Laurie Casas, MD

Medscape: Therefore, everything sort of grows into place?

Dr. Moelleken: Exactly. This is very different from using permanent stitches to hold something in place. Treadlift techniques, for example, aren't effective. If you take a stitch and elevate tissues so that they are held in place only by the tension of the suture, the body will just cut through those sutures like butter. You won't have a permanent effect. Only if the tissues are actually disconnected, put in the proper place, and held temporarily there by sutures until the body can mend in the new position can you get an effective lift.

Medscape: For Medscape readers, can you walk through this newer approach that you have developed?

Dr. Moelleken: I developed a suborbicularis approach to the cheek lift called the *superficial cheek lift*. Before this, most cheek lifts had incisions that went down to the bone. I thought, "Why lift the periosteum? It produces nothing except complications and long healing times. Why not just go underneath the muscles where the tissues are more mobile and more easily placed?" That was in 1999, and I've modified the procedure to include minimally invasive versions that avoid the orbital septum.

Medscape: Does it make for a shorter surgery overall?

Dr. Moelleken: Yes. The surgery is shorter and safer. The patient has far less edema, or chemosis, of the eyelid and conjunctiva. Reducing dissection and manipulation around the lymphatics in the corner of the eye reduces swelling and hindrance to the lymphatic drainage of the eye.

Medscape: Is your approach catching on with other surgeons?

Dr. Moelleken: Overall, very few surgeons specialize in the midface. However, articles coming out now generally trend toward avoidance of subperiosteal surgeries. Even diehard subperiosteal proponents are abandoning the subperiosteal approach. Of the surgeons who do the lower eyelid incision, almost all are switching to a more minimal approach and to a suborbicularis approach as opposed to going through the orbital septum.

Medscape: How difficult is it for surgeons to perform the newer technique that you developed?

Dr. Moelleken: I caution surgeons to start slowly and do very minimal versions of the procedure at first. I believe that the midface is almost a subspecialization within plastic surgery and is not something that should be attempted right out of residency. It is a technically difficult and problem-prone area. Surgeons really need training to do this properly.

Medscape: Are there many approaches for the lower eyelid?

Dr. Moelleken: I don't like the altered appearance that results from many of the through-the-mouth-and-temple procedures. They should be used only if you deliberately want to increase the patient's cheekbone on the sides of their cheeks and take the cheek mass from below the cheeks and raise it up and out.

Another category of cheek lift that's emerging is a through-the-face-lift incision, the superficial musculoaponeurotic system (SMAS), where the deep tissues are no longer simply removed. For years people did "SMASectomies"; they cut in the SMAS, pulled the SMAS up and out, cut off the extra tissue, and then sewed it up. That's the way 99% of face-lifts are still done.

Now there is a trend in face-lifts to take the deep tissues and position them in a very superior direction -- not to the side anymore. No tissue is removed; it is simply positioned upward. That preserves volume and positions it upward to increase cheek prominence and diminish jowl prominence. It affects an area lower than the normal cheek lift operation and is done during a face-lift.

Medscape: What are the long-term effects with these different approaches?

Dr. Moelleken: These are all permanent surgeries. All elevate the cheeks and give the face a more youthful look. Youthful facial contours have prominent cheekbones, an S-shaped curve, and relatively little tissue in the jowl area. As the face ages, much of the tissue sags downward; volume is lost; and the face becomes very square. The cheek becomes almost uniform with the jowl area. That is reversed in cheek lift and face-lift procedures, in which the deep tissue is specifically elevated. This is not a normal type of face-lift; it's a volume-adjusting face-lift, in which the surgeon specifically moves the deep tissues upward. The skin goes in an entirely different direction from the SMAS. The SMAS goes up, and the skin goes further back.

With techniques like the deep plane or the composite in which you do not separate the layers, everything has to go in the same direction -- the skin and the deep layer. Also, when the skin goes up on the side of the face, it causes the sideburn to rise -- a telltale sign that a person had facial work.

Medscape: What other cheek lift approaches are being performed now?

Dr. Moelleken: Some totally new categories of cheek lifts are being performed, in addition to the one of which I just talked. Some are actually easier and more widely performed. Usually they involve some combination of making an incision in the mouth and disconnecting the cheek from the bone at a subperiosteal level. A second incision is made in the temple area, and then either sutures or a fixation device -- such as an Endotine™ [CoaptSystems; Palo Alto, California] -- are used to lift up the cheek. These are both called "cheek lifts" but they do totally different things.

The cheek lift that originates underneath the eye helps the lower eyelid and the cheek. The cheek lift that originates in the temple and the mouth elevates the cheek up and to the side. It's a very different procedure. It's easier to perform

and the complication rate is relatively low. However, nerve problems in the frontal branch and some atrophy of fat in the temporal fat pad can occur, which can cause a hollowness in the temple and scarring on the temple where an incision is made. Aside from that, the procedure is fairly straightforward.

Endotine™ makes some self-dissolving hooklike fixation devices that fit underneath the disconnected tissue and hold it up in an upward position. It's a new type of cheek lift but still does not address the lower eyelid, and it causes a widening of the distance between the cheekbones. It also causes a change in the intermalar distance, which can make the patient appear Asian. When you widen that distance with a cheek lift surgery, you alter the patient's appearance.

Medscape: Where are things heading in plastic surgery?

Dr. Moelleken: We are heading toward more and more minimally invasive surgery.

Medscape: Thanks so much for sharing your knowledge today and talking to Medscape.

Print This Email this

MORE ON THIS TOPIC

eMedicine Clinical Reference

- Cheek Reconstruction (Otolaryngology and Facial Plastic Surgery)
- Lower Eyelid Reconstruction, Entropion (Otolaryngology and Facial Plastic Surgery)
- Lower Eyelid Reconstruction, Ectropion (Otolaryngology and Facial Plastic Surgery)

Medscape Resource Centers

- Aesthetic Medicine Resource Center