The Facial Fat Compartments Revisited: Clinical Relevance to Subcutaneous Dissection and Facial Deflation in Face Lifting

James M. Stuzin, M.D.
Rod J. Rohrich, M.D.
Erez Dayan, M.D.

Miami, Fla.; and Dallas, Texas

Summary: The facial fat compartments were described over a decade ago, but their clinical relevance to both deflation and techniques in facial rejuvenation is underappreciated. Although much of the literature following their description has focused on further anatomical elucidation of compartment anatomy, clinical relevance has focused on volumetric compartment augmentation. From the authors' perspective, understanding compartmentalization of facial fat provides an anatomical roadmap of the facial subcutaneous plane and a patient-specific guide for the degree of skin flap dissection in facial rejuvenation. The compartmentalization of facial fat also explains the regional development of cheek deflation in aging. An individualized treatment plan to restore facial shape can be achieved with deep compartment volume augmentation and repositioning of superficial facial fat using the superficial musculoaponeurotic system. (*Plast. Reconstr. Surg.* 144: 1070, 2019.)

The compartmentalization of facial fat was first described by Rohrich and Pessa in 2007, recognizing that facial fat is not homogeneous, but rather a series of compartments separated by specific fibrous septa.[1] Each facial fat compartment has its own vascular blood supply, thickness, and fascial consistency. Some fat compartments are thin and fibrous, whereas others contain a large volume of fat that dissects easily. The compartmentalization of facial fat therefore explains the regional variations of the cheek, noted in the subcutaneous plane when preforming a face lift. Although much of the anatomical emphasis in facial rejuvenation has focused on elucidating sub–superficial musculoaponeurotic system (SMAS) anatomy,[2–4] an understanding of the superficial fat compartments provides a topographic depiction for subcutaneous dissection and a method for recognition of facial nerve danger zones located adjacent to transitions between compartments.

The facial fat compartments also serve as a model for deflation, confirming the observation that facial deflation tends to be compartment-specific rather than a homogeneous occurrence in aging. Facial fat compartments exist both superficial and deep to the SMAS.[1,5] The superficial facial fat, which lies within the subcutaneous plane, is superficial to the SMAS, and can be manipulated in a SMAS face lift. Deep fat compartments are situated over the periosteum of the orbit and midface (maxilla, zygoma, and pyriform aperture) lying deep to the mimetic muscles.[5] The deep fat of the cheek is contiguous with the deep fat of the lower lid (sub–orbicularis oculi fat), and blends the lower lid with the cheek in youth. Deep malar fat along the anterior maxilla and zygoma contributes to anterior malar projection in youth. Of note, both the superficial and deep fat compartments deflate over time and are responsible for many features of the aging face.[6]

From the Institute of Aesthetic Medicine and the Dallas Plastic Surgery Institute.
Received for publication January 20, 2019; accepted June 3, 2019.
Copyright © 2019 by the American Society of Plastic Surgeons
DOI: 10.1097/PRS.0000000000006181

Disclosure: *Dr. Stuzin has no financial interests to disclosure. Dr. Rohrich receives instrument royalties from Eriem Surgical, Inc., and book royalties from Thieme Medical Publishing; he is a clinical and research study expert for Allergan, Inc., Galderma, and MTF Biologics, and the owner of Medical Seminars of Texas, LLC. No funding was received for this article. Dr. Dayan is a consultant for InMode Aesthetic Solutions and an owner/developer of wikiPlasticSurgery.com.*

Related digital media are available in the full-text version of the article on www.PRSJournal.com.

Copyright © 2019 American Society of Plastic Surgeons. Unauthorized reproduction of this article is prohibited.

THE SUPERFICIAL FACIAL FAT COMPARTMENTS

Superficial facial fat is separated into specific compartments by the extension of the deeper retaining ligaments through the cheek to insert into the skin.[7,8] Rather than being diffuse in their penetration of the SMAS, the retaining ligaments form specific fibrous septa between compartments. These junctional boundaries are also the location of vascular perforators. Clinically, while performing subcutaneous dissection of the cheek, encountering numerous perforators during dissection indicates an anatomical transition from one superficial fat compartment to the next.[8]

Although there are many superficial fat compartments, the five compartments that the plastic surgeon encounters in a face lift include the following: (1) lateral compartment, (2) middle compartment, (3) superficial malar compartment, (4) nasolabial fold compartment, and (5) jowl compartment (Fig. 1).[1] If the dissection is performed under direct visualization aided by transillumination, it is possible for the surgeon to recognize which compartment is being dissected and when the transition between compartments occurs.

Lateral Compartment

The lateral compartment is located in the preauricular region and tends to be narrow and thin, following the superficial temporal artery cephalically toward the temple (Fig. 2). Typically, the lateral compartment is only 3 to 5 cm in width, and consists of dense, fibrous, and vascular fat. This compartment is directly situated over the parotid gland and extends caudally along the lateral border of the platysma as the condensation of fascia which has been termed platysma auricular ligament.[7] As subcutaneous dissection proceeds anterior to the parotid, the middle compartment is encountered and the dissection becomes less fibrous.

Middle Fat Compartment

The middle fat compartment is situated medial to the parotid and lateral to the anterior border of the masseter. The fat within this compartment typically is thicker, less fibrous, and less vascular than the lateral compartment. This is the compartment where the majority of subcutaneous dissection of the cheek is performed in a face lift. Because this large compartment is thick and relatively avascular, it tends to dissect easily. The medial border of the middle compartment is bounded by the masseteric ligaments and superiorly by the zygomatic ligaments, such that the medial boundary is adjacent to

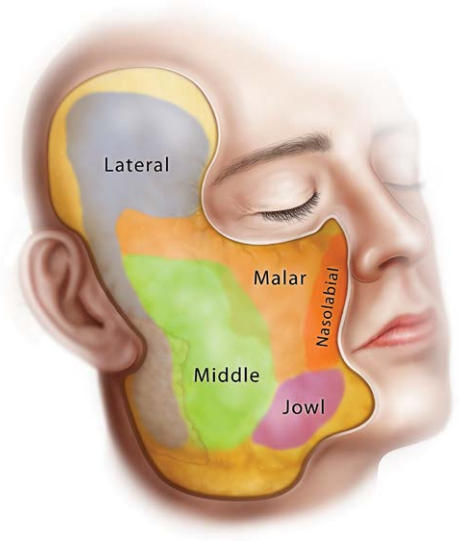

Fig. 1. An artist's illustration of the five superficial fat compartments: lateral compartment, middle compartment, superficial malar compartment, nasolabial fold compartment, and jowl compartment.

Fig. 2. Cadaver dissection of the lateral fat compartment, which is a narrow compartment consisting of fibrous fat overlying the parotid. This compartment extends cephalically toward the temporal region, paralleling the superficial temporal artery. Caudally, it extends toward the neck along the lateral border of the platysma. Note that the nasolabial fat compartment is also stained in this cadaver photograph. (Reprinted from Rohrich R, Pessa J. The fat compartments of the face: Anatomy and clinical implications for cosmetic surgery. *Plast Reconstr Surg*. 2007;119:2219–2227; discussion 2228–2231.)

Copyright © 2019 American Society of Plastic Surgeons. Unauthorized reproduction of this article is prohibited.

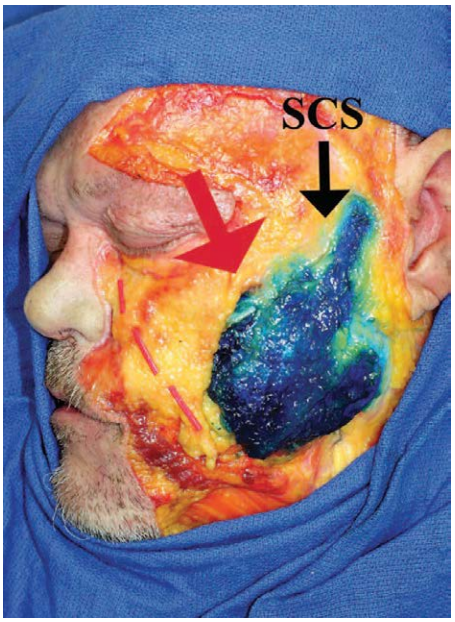

Fig. 3. The middle fat compartment is the compartment where the majority of subcutaneous dissection is performed in face lifting. This compartment consists of thick, relatively avascular fat and is situated between the lateral compartment and the anterior border of the masseter. The *red arrow* represents a zone of fixation along the lateral zygoma, where the middle compartment abuts the superficial malar fat compartment. This zone of adherence is secondary to a merging of the upper masseteric ligaments with the zygomatic ligaments at this location. (Reprinted from Rohrich R, Pessa J. The fat compartments of the face: Anatomy and clinical implications for cosmetic surgery. *Plast Reconstr Surg*. 2007;119:2219–2227; discussion 2228–2231.)

the malar and jowl compartments. The dissection between the middle, malar, and jowl compartments is frequently vascular, as the surgeon encounters perforators that ascend between the compartments. Transitions between compartments will also display differences in the appearance of the subcutaneous fat. The malar fat along the lateral malar eminence frequently exhibits a cobblestone appearance, signifying the transition between the middle and malar compartments. Fluffy avascular jowl fat is typically noted following the transition between the middle and jowl compartments. Once the dissection proceeds anteriorly into the malar and jowl compartments, the surgeon encounters easily dissected fat as the subcutaneous dissection proceeds within the mobile anterior cheek, medial to the restraint of the retaining ligaments (Figs. 3 and 4).

Superficial Malar Compartment

The superficial malar compartment is situated along the lateral aspect of the zygoma and extends anteriorly toward the paranasal region, providing

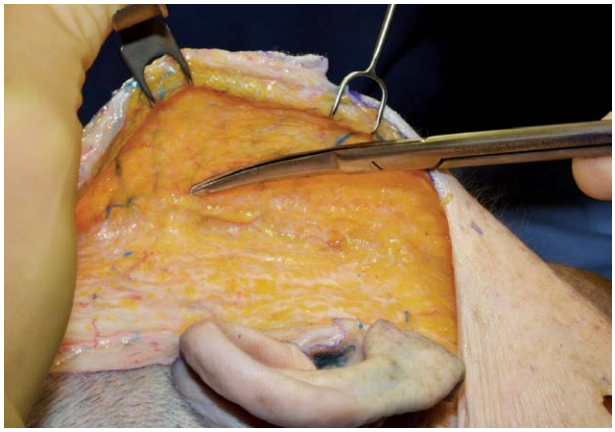

Fig. 4. This cadaver photograph demonstrates the transition between the middle and malar compartments juxtaposed to the lateral zygoma. The scissors point to the cutaneous insertion of the zygomatic ligaments. Note the numerous vascular perforators present in this location. Resulting from regional anatomy, dissection along the transition between the middle and malar compartments is both fibrous and vascular.

volume to the anterior cheek. This compartment is situated superficial to the orbicularis oculi and elevators of the upper lip (Fig. 5). When dissecting from the lateral cheek (middle compartment), the

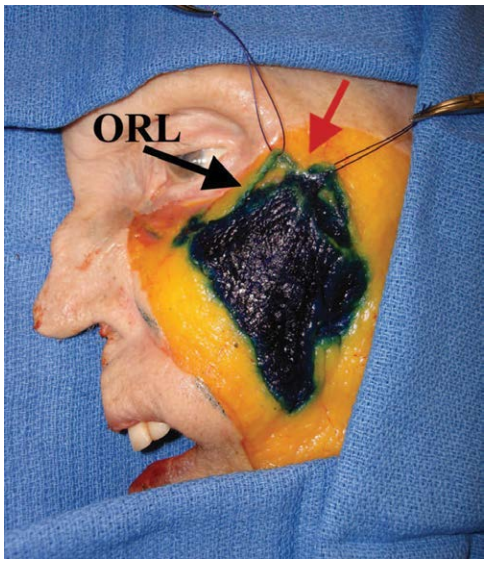

Fig. 5. The superficial malar fat compartment provides volume to the anterior cheek, situated adjacent to the middle, nasolabial, and jowl compartments. The *red arrow* represents the zone of fixation between the middle and malar compartment. Once subcutaneous dissection proceeds past this zone of fixation and anterior to the masseter, the mobile region of the cheek is encountered. (Reprinted from Rohrich R, Pessa J. The fat compartments of the face: Anatomy and clinical implications for cosmetic surgery. *Plast Reconstr Surg*. 2007;119:2219–2227; discussion 2228–2231.)

Copyright © 2019 American Society of Plastic Surgeons. Unauthorized reproduction of this article is prohibited.

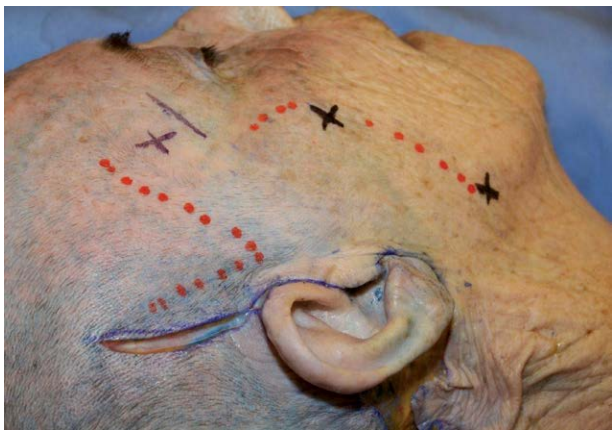

Fig. 6. The junction between the fixed and mobile regions of the cheek anatomically represents the transition between the middle, malar, and jowl compartments. The *dotted red line* in the cheek demarcates this junction, delineating the extent of the zygomatic and masseteric ligaments forming the boundary between the fixed and mobile cheek. The *middle* and *lower black X* mark the zones of fixation formed by the upper and caudal masseteric ligaments, representing danger zones where motor nerve branches are superficially positioned within the transition zones between compartments.

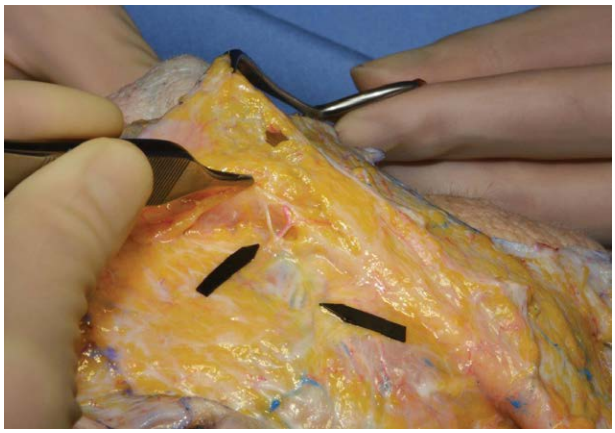

Fig. 7. The zygomatic nerve branch to the zygomaticus major is superficially positioned lateral to the zygoma (in the plane between the superficial and deep fascia) within the transition zone between the middle and malar compartments. In this cadaver photograph, the *upper arrow* marks where the nerve branch crosses the transverse facial artery to innervate the zygomaticus major along its deep surface. As this transition zone tends to be fibrous and vascular, inadvertent dissection deep to the SMAS may result in motor branch injury.

malar compartment is first identified along the lateral zygoma. At this juncture, the surgeon encounters numerous perforators from the transverse facial artery and dense fibrous zygomatic ligaments (i.e., McGregor patch).[4,7,8] The upper masseteric ligaments are similarly encountered along the inferior/lateral aspect of the zygoma, and the combination of ligamentous fibrous fat in conjunction with numerous vascular perforators can make it difficult to accurately identify the subcutaneous plane adjacent to the lateral zygoma. Accurate plane identification is important, as zygomatic branches of the facial nerve are typically superficial in this region.[9] The transition between the middle and malar compartment therefore represents a danger zone, and the surgeon should remain superficial to the SMAS in this region to prevent motor branch injury[8–12] (Figs. 6 and 7).

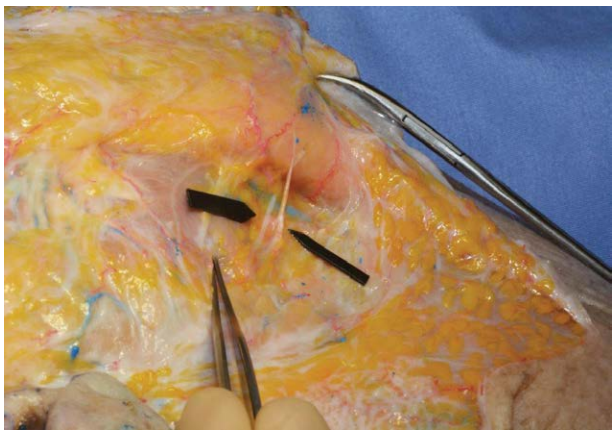

Fig. 8. The cervical (*lower arrow*) and marginal branches (*upper arrow*) are both situated adjacent to the angle of the mandible, juxtaposed to the caudal masseteric ligaments. As the cervical branch is more superficially positioned, in the plane between superficial and deep fascia, inadvertent dissection deep to the platysma within this transition zone may result in motor branch injury.

Jowl Compartment

The jowl compartment consists of fluffy, thick fat, and is situated between the masseteric ligaments and the mandibular ligaments overlying the facial portion of the platysma.[4] Jowl fat tends to be thick, avascular, and easy to dissect. The masseteric ligaments separate the middle and jowl compartments. Overlying the midportion of the masseter, these ligaments consist of thin fibers that are easily dissected. The masseteric ligaments adjacent to the caudal masseter and angle of the mandible tend to be thicker fibers, forming a more defined adherence between the skin, subcutaneous fat, and platysma. In thin patients, the subcutaneous plane superficial to the platysma along this transition point can be poorly defined. At this location, dissection deep to the SMAS may injure the cervical branch situated in the sub-SMAS plane just deep to the platysma. The transition between the caudal border of the middle and the jowl compartment therefore represents another danger zone during subcutaneous dissection for motor branch injury (Fig. 8).

Copyright © 2019 American Society of Plastic Surgeons. Unauthorized reproduction of this article is prohibited.

In aging, attenuation of support from the masseteric ligaments allows the platysma and overlying jowl fat to descend into the neck and radially expand outward from the mandibular border, obscuring the definition of the jawline.[4] Accentuating jowl prominence in aging is the tendency for this compartment to rarely deflate, allowing the jowl to become more noticeable as it is juxtaposed to perioral deflation.

Nasolabial Fold Compartment

The nasolabial fold compartment sits just lateral to the nasolabial fold, and anterior to the superficial malar compartment. This fat compartment consists of thick dense fat, and rarely deflates in aging. For this reason, the nasolabial compartment typically becomes more obvious in aging as the adjacent malar compartment and perioral regions deflate.

THE SIGNIFICANCE OF SUPERFICIAL FAT COMPARTMENTS IN FACIAL SKIN FLAP DISSECTION: RECOGNITION OF THE TRANSITION BETWEEN THE MIDDLE, MALAR, AND JOWL COMPARTMENTS

The degree of subcutaneous dissection required in a face lift is widely debated.[13–17] From our perspective, the degree of subcutaneous release can be individualized based on patient-specific anatomy. Recognition of which superficial facial fat compartment is being dissected provides guidance as to when the facial skin flap has been adequately mobilized from the retaining ligaments. Anatomically, the junction between the middle, malar, and jowl compartments represents the transition between the fixed and mobile regions of the cheek. If the surgeon recognizes when this transition occurs by direct visualization and compartment identification, the degree of subcutaneous dissection may be individualized based on patient-specific anatomy. Once the subcutaneous dissection has extended into the mobile anterior cheek, little is gained by further medial dissection. Compartment recognition prevents both underdissection and overdissection of the skin flap, limiting morbidity and increasing aesthetic control (Fig. 8) [**See Video (online)**, which demonstrates a cadaveric dissection of fat compartments and clinical correlation to face lift revised.]

DEEP FACIAL FAT COMPARTMENTS

The deep compartments of the cheek (deep malar compartment and suborbicular fat) lie

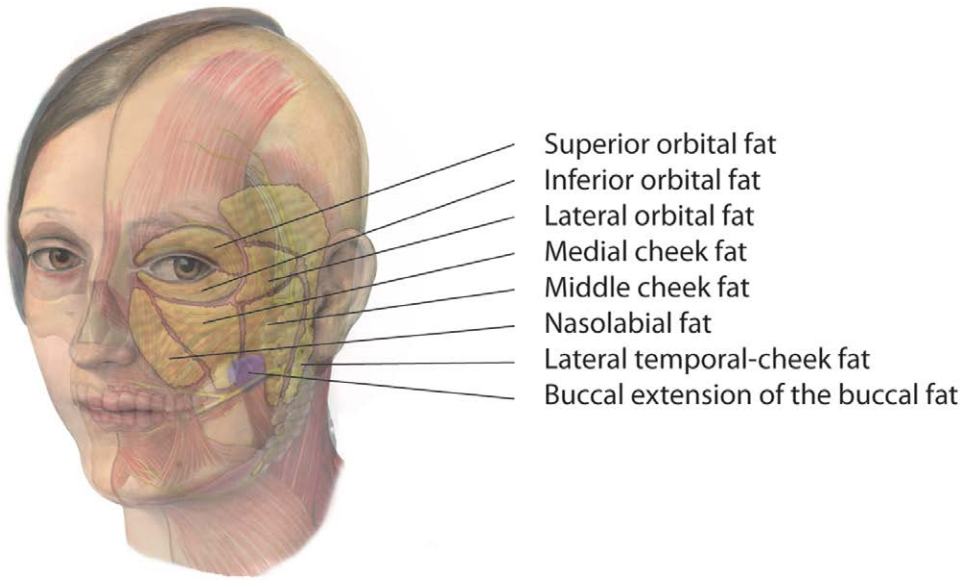

Fig. 9. The deep malar compartment overlies the periosteum of the anterior cheek, deep to the mimetic muscles. The deep malar compartment exhibits a medial and lateral component and abuts the suborbicular (sub–orbicularis oculi fat) fat compartment of the lower lid. The medial component abuts the pyriform aperture and provides volumetric blending between the perioral region and anterior cheek in youth. Similarly, the lateral component abuts the lower lid and sub–orbicularis oculi fat, providing volumetric blending across the lid cheek junction in youth. (Reprinted from Gierloff M, Stöhring C, Buder T, Gassling V, Açil Y, Wiltfang J. Aging changes of the midfacial fat compartments: A computed tomographic study. *Plast Reconstr Surg*. 2012;129:263–273.)

Copyright © 2019 American Society of Plastic Surgeons. Unauthorized reproduction of this article is prohibited.

Fig. 10. (*Left*) Front view. This 58-year-old woman exhibits the typical morphologic changes associated with malar deflation. Note the appearance of the vertically long lower lid, which visually descends into the cheek, forming the infraorbital V deformity, the hallmark of deep deflation. The left side of the cheek exhibits a greater degree of deflation and a vertically longer lower lid as compared to the right side. (*Right*) Left oblique view. Deflation of both the superficial and deep malar compartments contributes to the formation of the infraorbital V deformity. Note also the abrupt demarcation between the lateral and anterior cheek, signifying deflation in the region where the deep malar fat pad abuts the buccal fat pad, another stigma of deep malar deflation. Both the nasolabial and jowl compartments show little evidence of deflation in this patient, as these compartments rarely deflate in aging.

deep to mimetic muscles and overlie the periosteum of the orbit, midface, and pyriform aperture.[5] The deep facial fat compartment that supports the lower lid (sub–orbicularis oculi fat) is situated deep to the orbicularis oculi and is divided into a lateral and medial component. The anterior cheek is supported by the deep malar fat pad, which similarly consists of a medial and lateral component. The medial component of deep malar fat is situated along the pyriform aperture and blends the perioral region with the cheek in youth. The lateral component of deep malar fat contributes to anterior malar projection and blends the anterior cheek with the lateral cheek, where it abuts the buccal fat pad. This lateral component also abuts the lower lid (and sub–orbicularis oculi fat), blending the eyelid and cheek in youth (Fig. 9).

THE ANATOMY OF CHEEK DEFLATION

Facial deflation is responsible for many of the morphologic changes seen with aging. Deflation tends to be compartment specific rather than

Table 1. Characteristics of Facial Fat Compartments

Fat Compartment	Tendency to Deflation with Aging	Characteristics
Lateral	Fourth decade	Thin, fibrous, and vascular
Middle	Fourth decade	Thick, relatively avascular and easy to dissect
Malar		
Superficial	Fifth decade	Vascular and fibrous along the transition between middle and malar compartments
Deep	Fifth decade	Hallmark of deflation is the vertically long lower lid and infraorbital V deformity
Jowl	Rare	Accentuated in aging by deflation of the middle compartment and perioral region
Nasolabial	Rare	Accentuated in aging by deflation of the malar compartment and perioral region

Copyright © 2019 American Society of Plastic Surgeons. Unauthorized reproduction of this article is prohibited.

Fig. 11. Preoperatively, this 54-year-old woman exhibits lateral cheek deflation and deep malar deflation. As the deep malar compartment deflates, the vertical height of the lower lid increases and a demarcation line develops between the lateral and anterior cheek in the region where the deep malar pad abuts the buccal fat pad. Postoperatively, using the superficial fascia in an extended SMAS face lift, facial fat is repositioned into the upper lateral cheek, improving lateral cheek deflation. The deep compartment has been volumetrically augmented with 3 cc of autologous fat. Note a restoration of volumetric highlights and blending between the lower lid and anterior and lateral cheek, as superficial fat repositioning is combined with deep compartment augmentation. (Reprinted from Sinno S, Mehta K, Reavey PL, Simmons C, Stuzin JM. Current trends in facial rejuvenation: An assessment of ASPS members' use of fat grafting during face lifting. *Plast Recontr Surg*. 2015;136:20e–30e.)

Copyright © 2019 American Society of Plastic Surgeons. Unauthorized reproduction of this article is prohibited.

homogenous, meaning different compartments deflate at different ages. Typically, deflation of the lateral cheek becomes evident in patients in their 40s (lateral and middle compartments), whereas malar deflation becomes evident in the fifth decade. Malar deflation results from a loss of fat in both the superficial and deep malar compartments. It leads to loss of anterior cheek volume and an increase in the vertical height of the lower lid, which has been termed the infraorbital V deformity[6] (Fig. 10).

As noted, the jowl and nasolabial compartments show little tendency to deflate and may enlarge in patients who gain weight over time. These compartments also tend to become more apparent with age, as they are juxtaposed to fat compartments that exhibit deflation[18] (Table 1).

The surgical significance of superficial versus deep deflation is that superficial deflation can be improved by repositioning of superficial fat by means of SMAS techniques. Deep deflation requires volumetric augmentation, as it is technically difficult to reposition fat into the deep compartments. SMAS techniques are useful for correcting lateral cheek deflation and volumetrically augmenting the lateral malar eminence but do little to improve deep deflation.[13–17] To correct deep deflation, it is our preference to add autologous fat to the deep malar compartment, adding volume in the supraperiosteal plane overlying the anterior maxilla and zygoma and along the pyriform aperture. Volume addition to the deep compartment improves cheek and perioral volume and ameliorates the infraorbital V deformity, shortening the vertical height of the lower lid[19,20] (Fig. 11).

Volume addition is becoming the norm in modern face-lift techniques. In a recent survey of the American Society of Plastic Surgeons, 85 percent of responding physicians reported using autologous volume augmentation in conjunction with their technique of face lifting. The correction of deflation in conjunction with SMAS techniques to reposition facial fat improves aesthetic control of shape and yields greater consistency in postoperative result.[19,20] Of note, the results of this survey demonstrated that the deep malar compartment was the region that received the greatest degree of volume augmentation (average, 3 cc per side). Physicians are now trending toward compartment-specific volume augmentation in both surgical and nonsurgical facial rejuvenation, using autologous fat and synthetic fillers to correct compartment deflation individualized for the anesthetic needs of the patient.[20–22]

CONCLUSIONS

Over the past several decades, emphasis in face lifting has focused on sub-SMAS anatomy. As we better understand the partitioning of the facial fat, the importance of compartment anatomy becomes equally clear. Performing subcutaneous dissection under direct visualization, with transillumination, aids in precise fat compartment identification; increasing surgical precision by providing a patient-specific degree for skin flap dissection. From a safety perspective, recognizing the transition zones between the middle, malar, and jowl compartments (where dense facial ligaments and vascular perforators are encountered), and understanding the relation of these transition zones to superficially positioned facial nerve branches, remains a key element for preventing inadvertent motor branch injury. Repositioning facial fat into regions of deflation along the lateral zygoma and lateral cheek remains the hallmark of modern SMAS face-lift techniques. Volumetric augmentation to the deep malar compartment and central face, regions of deflation that cannot be corrected by fat repositioning, remains a critical adjunct to restore facial shape in facial rejuvenation.

James M. Stuzin, M.D.
3225 Aviation Avenue, Suite 100
Coconut Grove, Fla. 33133
jms3225@bellsouth.net

PATIENT CONSENT

Patients provided written consent for the use of their images.

REFERENCES

1. Rohrich R, Pessa J. The fat compartments of the face: Anatomy and clinical implications for cosmetic surgery. *Plast Reconstr Surg.* 2007;119:2219–2227; discussion 2228–2231.
2. Skoog TG. *Plastic Surgery: New Methods and Refinements.* Philadelphia: Saunders; 1974.
3. Mitz V, Peyronie M. The superficial musculo-aponeurotic system (SMAS) in the parotid and cheek area. *Plast Reconstr Surg.* 1976;58:80–88.
4. Stuzin JM, Baker TJ, Gordon HL. The relationship of the superficial and deep facial fascias: Relevance to rhytidectomy and aging. *Plast Reconstr Surg.* 1992;89:441–449; discussion 450–451.
5. Gierloff M, Stöhring C, Buder T, Gassling V, Açil Y, Wiltfang J. Aging changes of the midfacial fat compartments: A computed tomographic study. *Plast Reconstr Surg.* 2012;129:263–273.

Copyright © 2019 American Society of Plastic Surgeons. Unauthorized reproduction of this article is prohibited.

6. Lambros V. Observations of periorbital and midface aging. *Plast Reconstr Surg.* 2007;120:1367–1376; discussion 1377.
7. Furnas DW. The retaining ligaments of the cheek. *Plast Reconstr Surg.* 1989;83:11–16.
8. Rohrich RJ, Pessa JE. The retaining system of the face: Histologic evaluation of the septal boundaries of the subcutaneous fat compartments. *Plast Reconstr Surg.* 2008;121:1804–1809.
9. Alghoul M, Bitik O, McBride J, Zins JE. Relationship of the zygomatic facial nerve to the retaining ligaments of the face: The sub-SMAS danger zones. *Plast Reconstr Surg.* 2013;131 245e–252e.
10. Roostaeian J, Rohrich RJ, Stuzin JM. Anatomical considerations to prevent facial nerve injury. *Plast Reconstr Surg.* 2015;135:1318–1327.
11. Stuzin JM, Rohrich RJ. Overview: Facial nerve danger zones. *Plast Reconstr Surg.* (in press).
12. Seckel B. *Facial Nerve Danger Zones.* 2nd ed. Boca Raton, Fla: CRC Press; 2010.
13. Stuzin J. Face lifting: MOC-PS CME article. *Plast Reconstr Surg.* 2008;121(Suppl):1–19.
14. Stuzin JM. Restoring facial shape in face lifting: The role of skeletal support in facial analysis and midface soft-tissue repositioning. *Plast Reconstr Surg.* 2007;119:362–376; discussion 377–378.
15. Baker DC. Lateral SMASectomy. *Plast Reconstr Surg.* 1997;100:509–513.
16. Hamra ST. The zygorbicular dissection in composite rhytidectomy: An ideal midface plane. *Plast Reconstr Surg.* 1998;102:1646–1657.
17. Barton FE Jr. Rhytidectomy and the nasolabial fold. *Plast Reconstr Surg.* 1992;90:601–607.
18. Lambros V. Personal communication, 2009.
19. Sinno S, Mehta K, Reavey PL, Simmons C, Stuzin JM. Current trends in facial rejuvenation: An assessment of ASPS members' use of fat grafting during face lifting. *Plast Reconstr Surg.* 2015;136:20e–30e.
20. Rohrich RJ, Ghavami A, Constantine FC, Unger J, Mojallal A. Lift-and-fill face lift: Integrating the fat compartments. *Plast Reconstr Surg.* 2014;133:756e–767e.
21. Schenck TL, Koban KC, Schlattau A, et al. The functional anatomy of the superficial fat compartments of the face: A detailed imaging study. *Plast Reconstr Surg.* 2018;141:1351–1359.
22. Li Z, Li J, Ma J, et al. Panfacial fat injection approach in young Asian patients for facial contouring: A goal-oriented classification method based on the facial fat compartments theory. *Plast Reconstr Surg.* 2017;140:253–260.

Advertising in *Plastic and Reconstructive Surgery*®

Please direct all inquiries regarding advertising in *Plastic and Reconstructive Surgery*® to:

Joe Anzuena
National Account Manager
Wolters Kluwer Health
Health Learning, Research & Practice
Two Commerce Square
2001 Market Street
Philadelphia, PA 19103
Mobile: 215-521-8532
Joe.Anzuena@wolterskluwer.com

Copyright © 2019 American Society of Plastic Surgeons. Unauthorized reproduction of this article is prohibited.