

Injectable Cosmetic Procedures for the Male Patient

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ABSTRACT

More than ever, male patients are seeking cosmetic procedures for a variety of reasons including but not limited to: a less aged appearance, social, or work related issues. Injectable neurotoxins and fillers are appealing to the male patient for their safety, rapid results, and minimal downtime. However, methods applied to the female patient do not always translate to the male patient. In this article, we review the anatomical, biological, and behavioral differences in men. We also provide an in-depth discussion of the techniques and dosages that are used in men, emphasizing the distinctions between the sexes. While once overlooked, this gender is becoming an important demographic in cosmetic dermatology.

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INTRODUCTION

Cosmetic procedures for men have seen a dramatic increase over the last decade. This is thought to be due to an aging "baby boomer" population, greater cultural acceptance of cosmetic procedures, and dramatic improvements in cosmetic products and technologies.[1] A survey performed by the American Society for Plastic Surgery Association found that men had over 1 million minimally-invasive cosmetic procedures in 2013, with injectable neurotoxin being the most popular and its use is up over 300% since the year 2000.[2] The other most popular procedures in men included microdermabrasion, laser hair removal, and soft tissue fillers.

The reasons for a male patient to see a dermatologist for a cosmetic procedure are broad. The most commonly stated reasons include: "look younger," "work related," and "to improve competitiveness".[3] Cosmetic interventions can rapidly be performed in the office with minimal downtime and achieve noticeable results, and men have become more aware of these procedures. Regardless of their motivations, an initial consultation is important to assess the patient's wishes and expectations. Some men will identify particular areas of concern, whereas others may have less specific interests other than overall aging. Although the desired procedures are often the same as in women, the techniques and treatment parameters are different. It is important to recognize that men have different expectations and goals, and their unique facial anatomy and way that they age are important factors to consider when performing cosmetic procedures.

Male Facial Anatomy and Biology

Sexual dimorphism refers to the phenotypic differentiation between men and women. There are significant differences in male skeletal anatomy, skeletal muscle mass, skin thickness, and fat distribution, making the approach to the male cosmetic patient different from their female counterpart. Examining the facial sexual dimorphism that exists is an important starting point for a discussion on tailoring male cosmetic treatments to achieve a more youthful, masculine result.

Differences in Facial Structure

Anatomical differences between the two sexes account for a majority of variation in facial soft tissues. The overall framework of the head is different between males and females, with the female skull being approximately four fifths the size of the male skull.[4] In addition to being larger in size, the male face has different cutaneous landmarks and overall shape, and the male facial skeleton is generally more angular. Males possess a greater forehead height and width with greater slope backwards from the brow.[5] In line with this, males have a more prominent supraorbital ridge providing a position of the eyebrow that is flatter, straighter, and lower along the supraorbital rim.[6,7] In comparison to the male's, the orbit in females is smaller and more oval; however, it is proportionally larger relative to the size of the skull.[8] Eyebrow shape, position, as well as orbital shape are all important considerations when using neuromodulators and dermal fillers.

The lower face may also represent a prominent area of concern for men. A "chiseled jaw" and a "strong chin" represent certain anatomical features that highlight defining male characteristics. These result from men having a more prominent flexure of the mandible, creating a wider and larger chin with more forward projection and a more defined jawline. Additionally, men have less soft tissue in the cheeks, resulting in

a flatter, more angular appearance.[9] Distortion of these proportions can result in feminization of the face.[10] Conversely, dramatization of these masculine features can also have a negative effect. Exaggerated features such as an excessively broad chin, heavy brow, or wide face may be perceived as aggressive or threatening.[11]

Differences in Facial Musculature and Skin

Overall, men have a greater muscle mass than women due to anabolic effects of androgens on skeletal muscle, and this holds true for the male face.[12, 13] Furthermore, men experience a greater amount of facial muscle movement even after accounting for differences in facial size.[14] Taken together, the greater muscle mass and amount of facial muscle movement may help explain why men have deeper, more pronounced rhytids with a unique distribution. This difference in muscle mass is an important consideration when treating the male patient with injectable neurotoxin.

Men have a thicker epidermis and dermis than women and the subcutaneous adipose layer is less prominent.[15, 16] The increased skin thickness and collagen content is attributed to the androgen receptor pathway, and may explain why male skin thins steadily with age while the thickness of female skin is relatively constant until menopause.[17] Male facial skin has an increased vascularity, making men more prone to bruising after minimally-invasive cosmetic procedures and injections.[18]

Hormonal Effects and the Aging Male

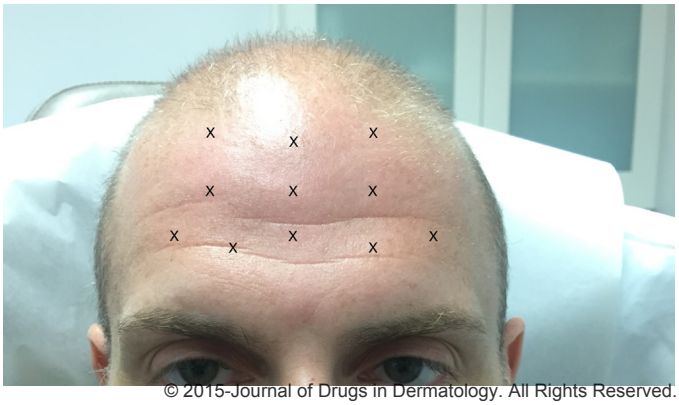
Men experience a gradual, steady decrease in total and free testosterone as they age[20] resulting in a consistent decline in soft tissue thickness, whereas women have an abrupt loss around the fifth decade, corresponding to the time of menopause.[21] In general, as men age they have more severe rhytids than women with the exception of the perioral area.[22, 23] This is thought to be the result of the thinner subcutaneous adipose layer in combination with thicker skin and more prominent facial musculature.[9] The aging male also experiences more prominent volume loss in certain anatomic locations. For example, men experience a greater downward shift of the lower eyelids with age.[24]

Behavioral Effects

The male face ages differently due to particular behaviors that affect the skin. Relative to women, men experience increased UV radiation exposure from outdoor occupations and lower adherence to sun protection behaviors.[25] Additionally, the increased prevalence of smoking contributes to advanced skin aging in men.[26, 27] Men are poor consumers of cosmetics including sunscreens.[28] Men are less likely to see a dermatologist or perform a self-skin exam. All of these factors contribute to more severe rhytid formation, loss of elasticity, and pigmentary alterations seen in the aging male patient.

> "Taken together, the greater muscle mass and amount of facial muscle movement may help explain why men have deeper, more pronounced rhytids with a unique distribution."

FIGURE 1. For males with alopecia, injection patterns higher up on the forehead can prevent unnatural residual wrinkling of the scalp area.



Forehead

Given the greater width, height, and muscle mass of the frontalis, injection of botulinum toxin in the forehead of men to decrease horizontal rhytids requires a greater number of injection points and units.[5] Two studies have shown differences in efficacy in males. Kearney et al. found abobotulinumtoxinA to be less effective in men at similar doses when compared to women.[29] When treating the glabella, Carruthers et al. concluded that increasing doses of onabotulinumtoxinA correlated with decreased ability to frown, improved global assessment, and increased feelings of satisfaction, self-confidence, and attractiveness.[30] Although men require greater units of neurotoxin, the goals of the patient must be kept in mind. Rhytids on the male face can produce a distinguished and "wise" look. Therefore, a natural aesthetic with some movement of the frontalis is advocated for most patients.

An important distinction to consider when injecting neuromodulator to the male forehead is the presence of androgenetic alopecia. Extending the injections to the frontal scalp can prevent unnatural wrinkling in the alopecic skin, which otherwise would provide a sharp cutoff (Figure 1).

Eyebrow

The male eyebrow sits lower on the orbital rim, and lies more horizontally and straighter than in women.[6, 7] Arching of the eyebrow can give a feminine look. Conversely, a brow that

hangs too low can give an aggressive appearance and interfere with function or give a heavy feeling.

Eyebrow placement is controlled by the frontalis and the corrugators. Spreading botulinum toxin injections evenly over the corrugators and frontalis, with purposeful injection of the lateral aspect of frontalis, can prevent arching of the brow. Staying 1-2 cm above the orbital rim avoids diffusion of the toxin into the muscles of the eyelid such as the levator palpebrae, which can result in ptosis and heaviness of the eyelid. For men who already have lower set eyebrows and a heavier eyelid, keeping frontalis injections higher on the forehead will help from overly depressing the brow and causing further ptosis.

Filler is best used to correct brows that have lost volume in the medial third or equally across the brow length. Lambros et al. recommends the use of hyaluronic acid (HA) filler with a gel consistency like Restylane® (Galderma Inc., Lausanne, Switzerland). The filler can be placed in a fanning technique inferior to the brow at the level of the superior orbital rim. Filler should be injected at the depth of the orbicularis muscle in order to avoid supraperiosteal arteries.[31]

Glabella

Men tend to have a deeper furrow in the glabella due to their anatomy. Botulinum toxin injection can soften the glabellar ridge and decrease the appearance of aggressiveness and age.

Similar to the forehead, men require a greater number of units to the glabella than women. In the study by Carruters et al., at least 40 units of onabotulinumtoxin A were recommended to the glabella, as they found 20 units of onabotulinumtoxinA was inadequate.[30] Brandt et al. concluded that men need doses greater than 50 units.[32] It may be challenging to predict the optimal number of units to use on the first visit, and overcorrection can cause an unnatural look in men. Therefore, Flynn recommends seeing patients 2 weeks after the initial injection.[33] Many patients require 10-20 additional units. Additionally, it is important to note that the corrugator supercilii extends farther laterally men. Thus, identification and injection of the lateral fibers can prevent suboptimal outcomes.

For glabellar furrows that do not respond to botulinum toxin, injectable fillers (off-label) can provide the effect desired. It is important to be aware of the higher risk for complications in this area including tissue necrosis, or product embolization (resulting in blindness) due to the anastomosis of the internal and external carotid artery systems, and many perforating arteries in this area.[34] Additionally, the glabella is an unforgiving location for bumps and nodules. It is important to aspirate before injection into this area to prevent inadvertent placement of filler into a vessel. If any resistance is felt during injection, the physician should stop and withdraw the needle to ensure proper placement.

In the glabella, HA fillers with low viscosity allow spreading of the filler to prevent an irregular contour. These include Juvéderm® Ultra or Ultra XC (Allergan Inc., Irvine, CA), Restylane®, Belotero® (Merz Aesthetics, Greensboro, NC), and Prevelle® Silk (Mentor Worldwide, LLC, Santa Barbara, CA). Juvéderm® and Restylane® are both capable of causing the Tyndall effect, in which particles within the filler scatter light, causing a blue discoloration when the filler is present superficially.[35] Diluting Juvéderm® and Restylane® with saline or lidocaine can reduce the particle concentration and lower the risk of Tyndall effect.[36]

Having the patient lying horizontally, glabellar lines can be approached from the superior aspect of the patient's head. The injection should be placed in the mid to upper dermis via a retrograde linear threading technique. Using small initial volumes of filler is recommended to prevent lumps and compression of vessels leading to superficial skin necrosis. Further correction can be performed at a later time if needed (Figure 2).

"Botulinum toxin injection can soften the glabellar ridge and decrease the appearance of aggressiveness and age."

Periocular Skin

Like women, men develop periocular rhytids with age. While many women may desire these rhytids to be completely gone, the presence of these lines in men can indicate maturity. Thus, a goal for some male patient may be to just soften these rhytids.

When injecting, the physician should keep in mind that the orbicularis oculi is broader and extends more laterally in men. Therefore, men often require a greater number of injection points in addition to a greater number of units. Flynn recommends starting with 15 units of onabotulinum toxin A per side.[33]

At times, the infraorbital eyelid can developed rounding after injecting neurotoxin to the periocular skin. Applying 1-2 units of onabotulinum toxin A to the inferior orbicularis oculi muscle can decrease muscle hypertrophy that contributes to this shelving. A lateral horizontal injection technique is recommended with superficial placement of neuromodulator.

Infraorbital Hollow

The infraorbital hollow is the depression under the eyes composed of the tear trough, nasojugal fold, and palpebromalar groove. Orbital fat herniation above the orbitomalar ligmanent in addition to loss of bone and soft tissue contribute to the infraorbital depression. These processes extend laterally past the tear trough, and inferiorly into the cheek. Wysong et al noted men had the greatest loss of soft tissue thickness in the tear trough (40% reduction) compared to other areas of the face.[21]

FIGURE 2. Hyaluronic acid injection to the glabella. (A) Before: Glabella showing a deep furrow. (B) After injection with a hyaluronic acid filler to the glabellar furrow.

Fillers are the main injectable used to restore volume in this area. Before starting, one should assess for excess festooning or fat pad herniation in the infraorbital hollow, since fillers may exacerbate the problem. Such patients may be more suitable for surgical intervention.

"Thinner" fillers like Restylane®, Juvéderm® Ultra or Ultra XC, and Prevelle® Silk work best in this area. As stated above, Boletero® has less risk of causing the Tyndall effect.[37] Polymethylmethacrylate (PMMA), poly-L-lactic acid (PLLA), and calcium hydroxyapatite (CaHa) are not desirable in this area because of risk of superficial papules.

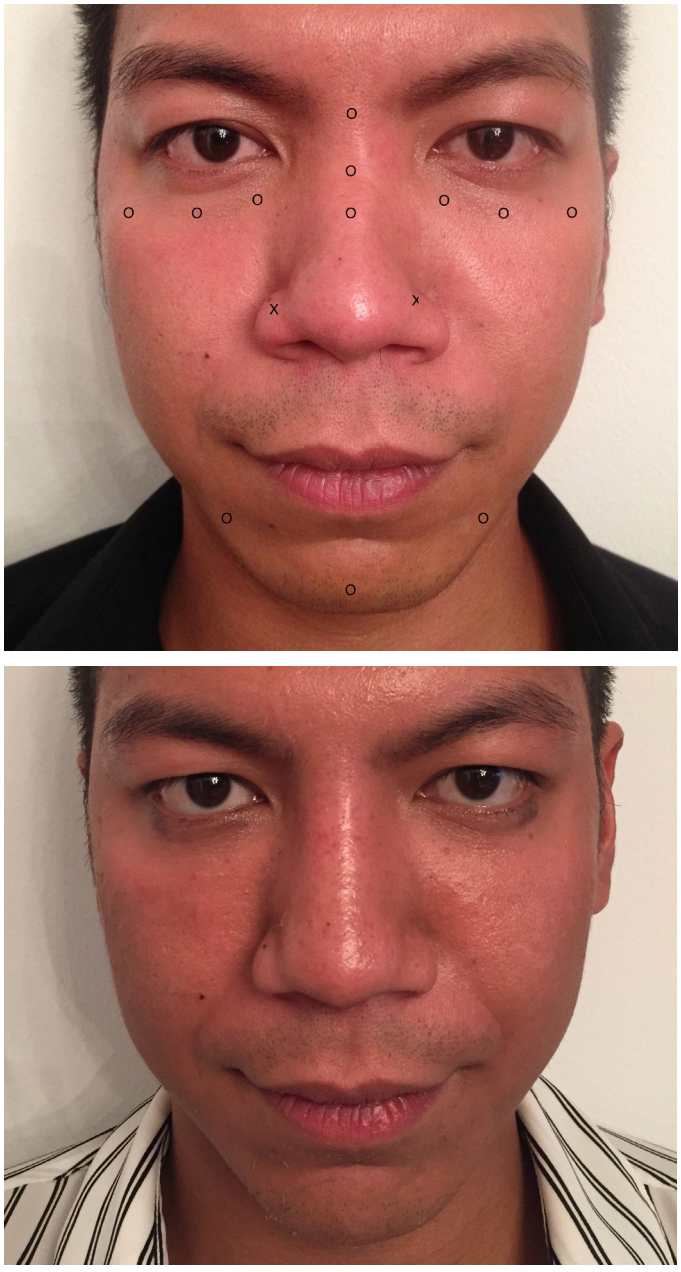
The filler should be placed in small aliquots along the tear trough and blended laterally and inferiorly (Figure 3). Filler is best injected below the orbicularis oculi along the orbital rim; the orbital septum should not be penetrated. It is important to correct the inferior extension of the tear trough as it extends onto the medial cheek as well as laterally.

Temples

Wysong et al. noted that the temple is the location of the second greatest loss of subcutaneous tissue (23%) in the aging male face.[21] Filler can be used to correct the concavity that forms at the temples. In this area, the superficial temporal artery runs along the superficial temporal fascia, while the temporal nerve is found just deep the superficial fascia.[38]

Higher G' HA fillers can be used like Perlane® (Galderma Inc., Lausanne, Switzerland) and Juvéderm® Ultra Plus and Ultra Plus XC[39] (all off label indications). Depots can be placed above the superficial temporal fascia in a retrograde linear fashion and massaged into place.

FIGURE 3. (A) Circles indicate filler placement and "x" indicates neurotoxin placement. (B) After hyaluronic acid filler to the dorsal nose, cheeks, chin, infraorbital hollows, and after neuromodulator to the forehead, corrugators, and nose.



Radiesse® and Sculptra® (Galderma Inc., Lausanne, Switzerland) can also be used.[39] Radiesse® is a biostimulatory filler made of CaHa micropsheres suspended in an aqueous gel of sodium carboxymethylcellulose and water. The microspheres stimulate new vessel and collagen production. The filler lasts for 1-2 years depending on the location in which it is used (lasting less time in locations with active muscle movement).[1]

Cheeks

The male cheek tends to be less prominent and flatter than the female cheek.[9] The ratio of the medial to lateral cheek of 1.1:1 points to a more even distribution of volume, while in women the medial cheek is fuller.[9] The apex of the male cheek is more medial, wider, and more subtle. Another distinction between the male and female cheek is the shape of the ogee curve, an S-shaped curve from the cheekbone to the mid-cheek hollow. The male ogee curve should be flatter in its lower S curve (concave portion).

Keeping such differences in mind, the physician should assess where the volume loss has occurred by examining the patient from the front, from the profile, and from below. Locating the malar eminence is also helpful. Two techniques can be used. In Hinderer's method, two lines are drawn (Figure 4). The first line is drawn from the lateral oral commissure toward the ipsilateral lateral iris, stopping at the infraorbital rim. The second line is drawn from the nasal ala to the ipsilateral infratragal notch. Where the two lines intersect denotes the point of maximal convexity and light reflection.[40]

In Wilkinson's method, a vertical line is drawn from the exocanthion to the edge of the mandible. The malar eminence is located about one-third the distance from the exocanthion to the mandible.[41]

Unlike the glabella and infraorbital hollow, more dense and large particle fillers can be used in the cheek. These include Juvéderm® Ultra Plus and Voluma, and Perlane®.[9] Product should be injected in a retrograde threading technique as well as laying down a foundation with initial depots onto the periosteum (where applicable). In the medial cheek, a subcutaneous plane is desired, whereas in the lateral cheek, a supraperiosteal plane will give more foundation. In the submalar cheek, since there is no bony support, a cross hatching technique, in the dermal and subdermal plane, can provide the needed structural support. Cross hatching combines multiple injections of linear threading that crisscross at right angles to provide volume in a square shape. A cannula can achieve similar results with decreased risk of puncturing the angular artery. Having the patient animate after injection will help identify any bulges or bumpy product contour. Gentle initial molding of the product right after injecting can ameliorate unevenness.

FIGURE 4. Malar eminence calculation. (A) Hinderer's method. (B) Wilkinson's method.

Nasolabial fold

Changes to the nasolabial folds manifests in different ways, including superficial lines, deep rhytids, or grooving due to ptosis of the cheek. If grooving is due to the descent of the malar fat pad, it may be helpful to start with volume correction of the zygoma prior to approaching the nasolabial fold.

Superficial lines are best filled with Restylane® or Juvéderm® Ultra or Ultra XC using a linear threading or serial puncture technique. Deeper grooves may be augmented by Perlane® or Juvéderm® Ultra Plus, Ultra Plus XC, or Voluma.

Smith et al. suggests that Artefill® (Suneva Medical Inc., San Diego, CA), a PMMA filler, may be useful in men who have difficulty maintaining appointments and may benefit from a long lasting product.[42] Artefill® is made of 30-50 micron spheres of PMMA suspended in non-crosslinked bovine collagen. After 3-4 months, the body produces new connective tissue in response to the PMMA. The author recommends using Artefill® incrementally 3 to 4 months apart until the desired level of correction is achieved. The filler should be injected in the deep dermis due to the risk of superficial papules. Thereafter, touch ups may not be needed for 5 years. The author notes many men prefer this treatment as results are gradual and less noticed by their coworkers.

Radiesse® is another option for the nasolabial fold. It should be placed in deep dermis or subcutaneous tissue via a retrograde tunneling technique.[9] In addition to nasolabial folds, Radiesse® can be used for marionette lines and elevating the corner of the lips.

Jawline

Many men desire a wide mandible with a prominent flexure, unlike the narrow and rounded lower face of a female. With age, men can develop masseter hypertrophy, loss of the angular shape of the jawline, and sagging of the pre-jowl sulcus.

Masseter hypertrophy in men can lead to irregular contour of the lower face and an aggressive appearance. Off-label botulinum toxin injections into the muscle can reduce masseter hypertrophy. Xie et al. classified five different bulging types of a contracted masseter: minimal, mono, double, triple, and excessive by using ultrasound studies and cadaver dissections.[43] The muscle is comprised of three different muscle layers which contract in different directions. Each layer in innervated by separate nerve branches that originate from the nervus massetericus. They found that the most prominent part of the masseter bulge corresponds to the distribution region of the nervus massetericus. Thus, identifying and injecting the most prominent bulge can allow for a reduced injection dosage and limited dispersion (Figure 5).

In the study, the authors found the minimal dose of onabotulinumtoxinA used was 20 units with the highest amount being 40 units. The greatest reduction of masseter hypertrophy occurred at 3 months. While the overall complication rate was 9.1%, it was 60% among patients who received higher doses. Therefore, a safe approach would be to start off with fewer units and supplement with further injections at a follow up visit.

Filler can be used to restore angularity and definition to the jawline and soften jowls. Here, thicker hyaluronic acid products like by Perlane® or Juvéderm® Ultra Plus, Ultra Plus XC, and Voluma are more useful. The filler can be placed against the mandible and molded along the jaw line.

Sculptra®, initially approved in the United States for AIDS-related lipoatrophy, may be a useful filler in correcting jowls and enhancing the jawline. The polymerized lactic acid stimulates macrophages and fibroblasts, leading to new collagen deposition.[44] Monheit et al. note that 3-5 treatments every few months can last 1-2 years.[1] The authors recommend diluting the filler in 5 or more cc of water for at least 3 hours to allow the material to hydrate. The filler can then be injected in aliquots of 0.01-0.02 cc in a grid-like pattern, followed by vigorous massage to avoid nodule formation.

FIGURE 5. Injection points for masseter hypertrophy are marked in "x".

Chin

Like the mandible, the male chin is wide and projects anteriorly. Loss of bone and soft tissue in the chin and medial cheek can cause decreased projection of the chin and downward displacement of the mid face over the melomental folds, causing downward displacement of the oral commissures and marionette lines.

Here, injection of botulinum toxin type A into the depressor angularis oris (DAO) decreases the pull on the corners of the mouth, elevating the oral commissure and softening marionette lines. Neurotoxin can also be used to soften the chin clefts, which can make men look aggressive. Flynn recommends 10 units of botulinum toxin type A to the mentalis.[33]

When augmenting the chin, it is helpful to assess the Riedel plane, which connects the relationship between the upper lip, lower lip, and chin.[45] A straight line drawn from the anterior projection of the chin should touch the lower and upper lip. This relationship can be used to assess where volume will be most beneficial. As in the jaw, fillers can be injected along the mandible and molded. For marionette lines, filler is best injected in the deep dermis in a cross hatching or fanning technique.

A more cross linked hyaluronic acid filler such as Perlane® or Juvéderm® Ultra Plus, Ultra Plus XC, and Voluma is recommended. Sculptra® and Radiesse® are also useful for the chin and rest of the jawline, as mentioned before.

Submental Fat

Submental fat, caused by aging, diet, lifestyle, and genetics, decreases the angularity and definition of the jawline.[46] This fat accumulates subcutaneously superior to the plastysma.

Male patients wishing to avoid surgical procedures may be interested in injectable deoxycholic acid, which disrupts the cell

membrane of adipocytes, leading to mild inflammation and phagocytosis by macrophages.[47]

More recently, a synthetically derived, purified formation of deoxycholic acid, or ATX-101, has undergone phase III trials for treatment of submental fat. McDiarmid et al. examined the pooled data of two European randomized phase 3 trials of ATX-101, which included 716 patients with a moderate or severe submental convexity and prominent to marked localized submental fat.[48]

"Male patients wishing to avoid surgical procedures may be interested in injectable deoxycholic acid, which disrupts the cell membrane of adipocytes, leading to mild inflammation and phagocytosis by macrophages. "

ATX-101 (1 or 2 mg/cm^2) was given in up to four treatment sessions separated by approximately 28 days.[48] At each session, patients received up to 0.2 ml at 1 cm intervals to the preplastysmal submental fat. Patients received a maximum of 50 injections and 10mL per session. Patients were then followed 4 and 12 weeks after the completion of treatment. ATX-101 was effective based on clinician-rated efficacy outcomes, a subjective self-rating scale, and caliper measurements. Adverse events included pain, edema, bruising, bleeding, numbness, erythema, and induration. These adverse events resulted in discontinuation in 7 and 10% of patients treated with ATX-101 1 and 2 mg/cm^2, respectively. Five cases of injection-site nerve injury occurred with the higher ATX-101 dose; none of the cases resulted in permanent symptoms.[48]

Males comprised 26% of treated patients. It is important to note that male patients only achieved statistical significance compared to placebo with the 2 mg/cm^2 concentration of ATX-101. Additionally, the authors found that although male patients age 18-30 experienced improvement, it was not statistically significant when compared to placebo. There may not have been enough power to show significance in this subgroup.[48]

Lips

With age, men experience thinning of the lip, blunting of the vermillion border and philthral columns, and downward projection of the angle of mouth. Perioral lines tend to be less severe than in women, thought to be secondary to smaller pilosebaceous units.[49]

The goals of lip restoration must be fully discussed with the patient. Under-correction is the safest approach to avoid a feminine lip. Overall, the volume ratio of the upper to lower lip should be one-third to two-thirds, and the upper lip should protrude 1 to 2 mm anteriorly compared to the lower lip. Ethnicity and cultural differences must be kept in mind, as patients of African descent tend to have fuller lips.[50]

Less viscous HA products are preferable, like Restylane® , Juvéderm® Ultra and Ultra XC, and Restylane® Silk. The patient should be warned about post-procedural edema, as HA fillers absorb water and can increase in size by 10-15%.[1] Non-hyaluronic acid fillers have an increased rate of nodules and granulomas in the lips, and thus their use is not recommended.

Nose

With age, the male nasal tip drops, causing an elongated nose that worsens with smiling. As rhinoplasty is the third most common procedure in men, neurotoxin and soft tissue filler can be used in an off-label manner to re-shape or restore nasal structures. In males, the desirable nasolabial angle tends to be smaller than in females (97 degrees versus 104.9).[51] Therefore, a nasal tip that is too elevated can feminize the male face. Additionally, the male radix starts at about the superior tarsal fold, which is higher than in females.[52] Another area that should be considered is the dorsum of the nose. In men, the dorsum of the nose approaches a straight line drawn from the radix to the nasal tip; females tend to have a more sloping line. Accordingly, nasal root and dorsum augmentation has become a popular procedure for the Asian patient, who tends to have a flatter radix and dorsum.[53] The ethnic background of the patient of the patient must be taken into account as nasal proportions vary greatly with ethnicity.

A hypertrophied depressor septi nasi can lead to nasal tip ptosis and upper lip shortening. The muscle arises from the orbicularis oris and periosteum above the central and lateral incisors, then inserts onto the nasal septum and/or medial cura.[54] Injecting neurotoxin into this muscle can elevate the nasal tip. Small aliquots should be placed to avoid diffusion into the orbicularis oris, which is only 3 cm away. Another muscle that contributes to the nasal tip is the musculus digastricus septi nasi labialis. This muscle pulls the nasal tip downward while lifting the upper lip. Neurotoxin injection here can further elevate the nasal tip.[55]

Filler can be used to adjust the nasal radix and dorsum. Since the skin on the radix is thicker than on the nasal dorsum, a high G′ filler with give enough lifting quality. A depot injection can be placed in this area, using small volumes.

Filler placed into the nasal dorsum can straighten the line between the radix and nasal tip, and can camouflage a dorsal

hump. It can also add vertical height, creating a narrowing effect, which may be desirable in men with broad flatter noses. Like in the radix, a thicker filler can provide more lifting. The filler should be placed in the supraperiosteal or supraperichondrial plane. The area can be approached laterally instead of perpendicularly. As with all injections in the nose, the physician should aspirate prior to injection, and inject small volumes.

CONCLUSION

The male patient represents an expanding market for cosmetic dermatology. While the tools may be the same, the application, dosing, and aesthetic considerations are inherently different when compared to the female patient. The male patient is also notoriously under-represented in the medical aesthetic literature and therefore a need for men to be included in clinical trials, dosing trials, and satisfaction studies is a must. When approaching the male cosmetic patient it is important to listen to the desires and reasons for the consultation. Staging procedures may also be beneficial, as this will add to a gradual improvement, which may be sought after, and avoid overcorrection.

DISCLOSURES

The authors have no related conflict of interests or financial disclosures.

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