

Evaluation of the Cosmetic Patient

(Bologna chapters 152, 153, 158, 159)

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Recognizing Beauty



Personal beauty is a greater recommendation than any letter of reference – Aristotle

Beauty is power; a smile is its sword – Charles Reade

Beauty is only skin deep, but it's a valuable asset if you're poor or haven't any sense. – Kin Hubbard

*Beauty is worse than wine, it intoxicates both the holder and beholder –
Immermann*

Ideal Face

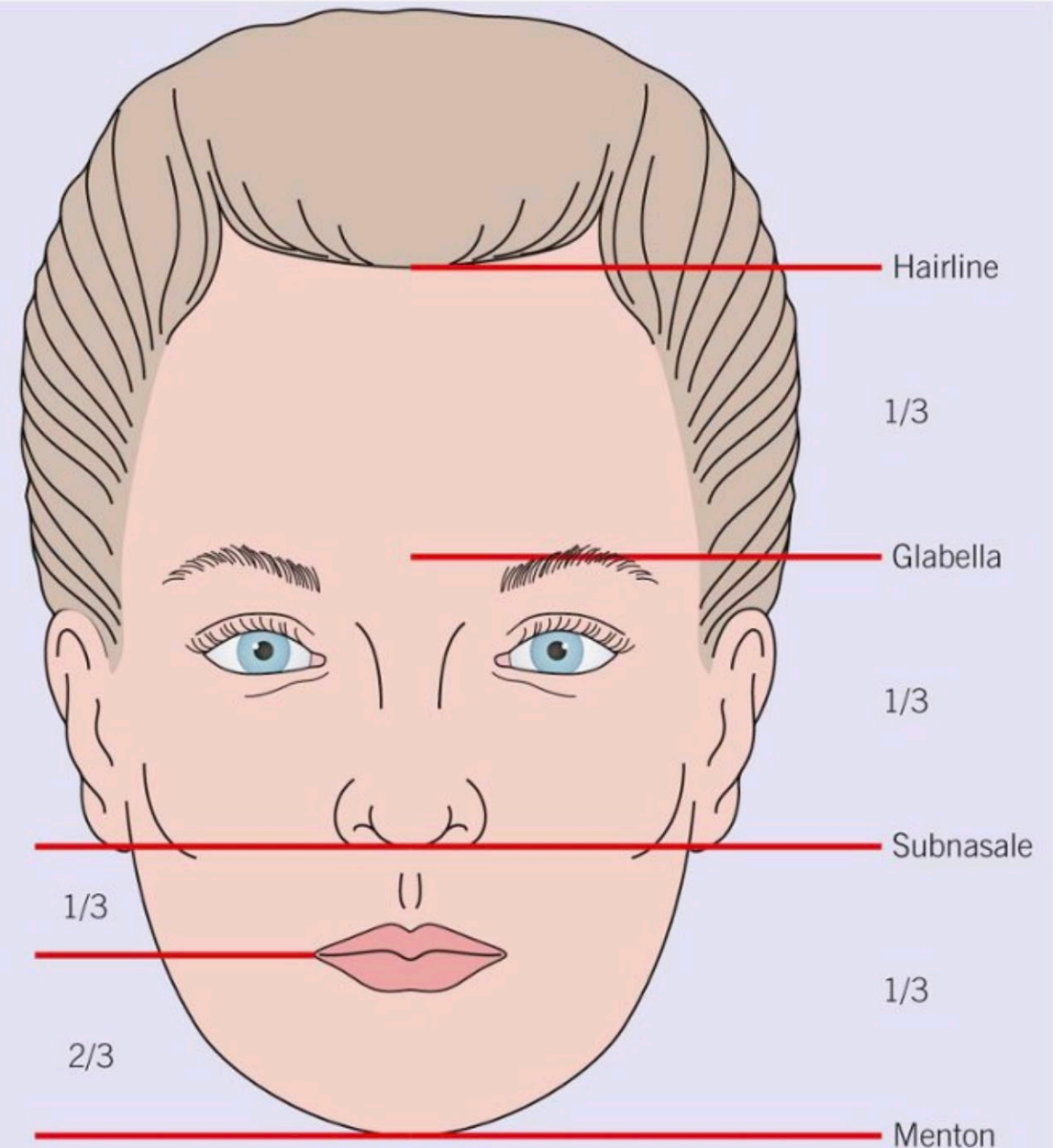
Divided into 3 equal parts

Ideal face proportions:

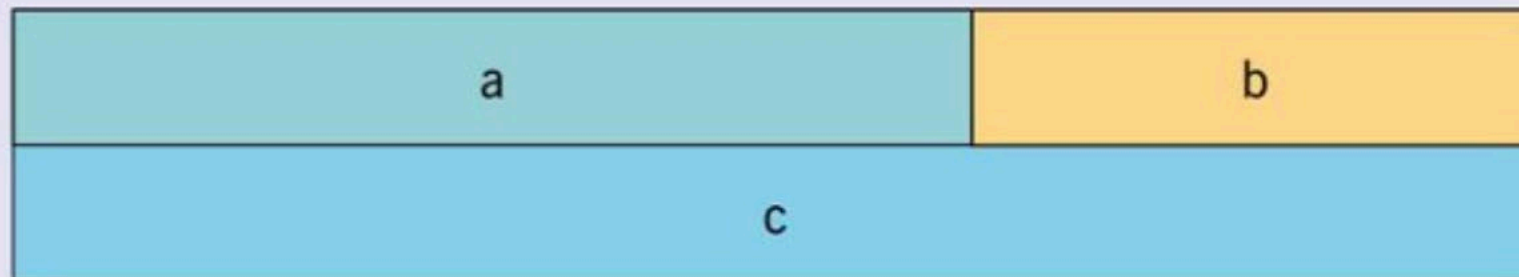
Symmetric, oval- or heart-shaped face with prominent cheekbones, taper jaw line, narrow nasal base and thin lips

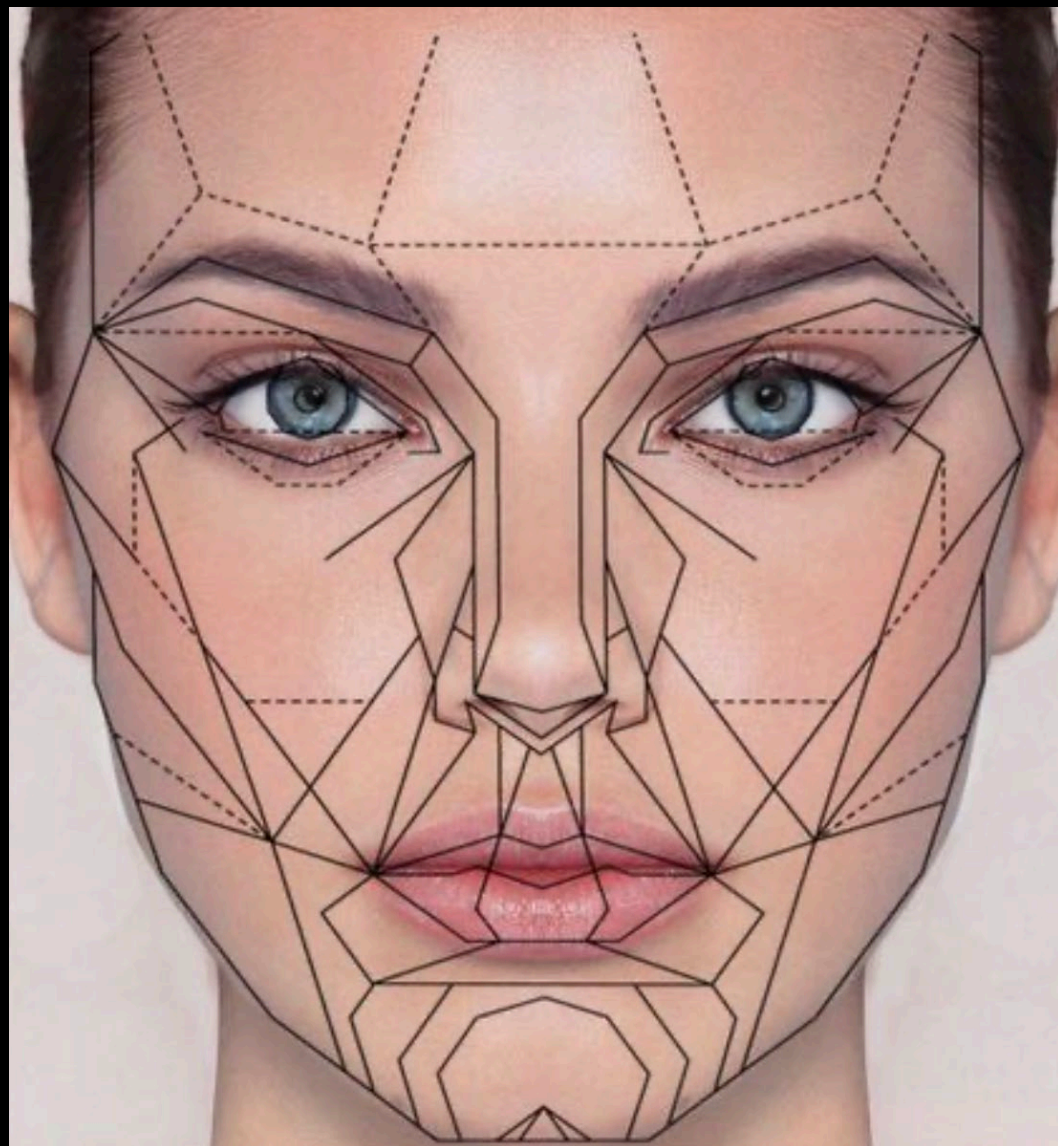
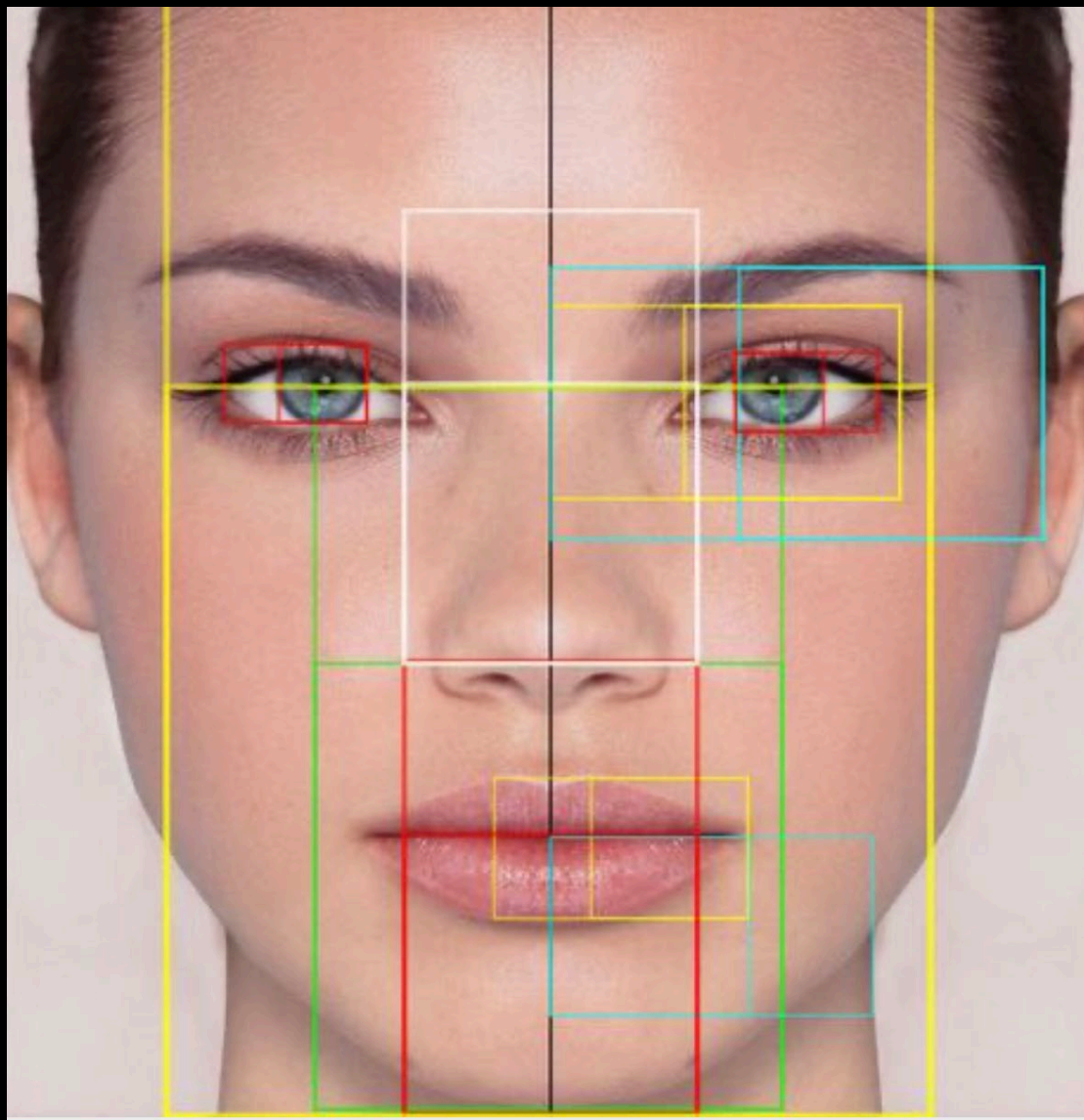
Proportions, however, are largely based on facial features in Caucasian women

Ethnic variations may exist

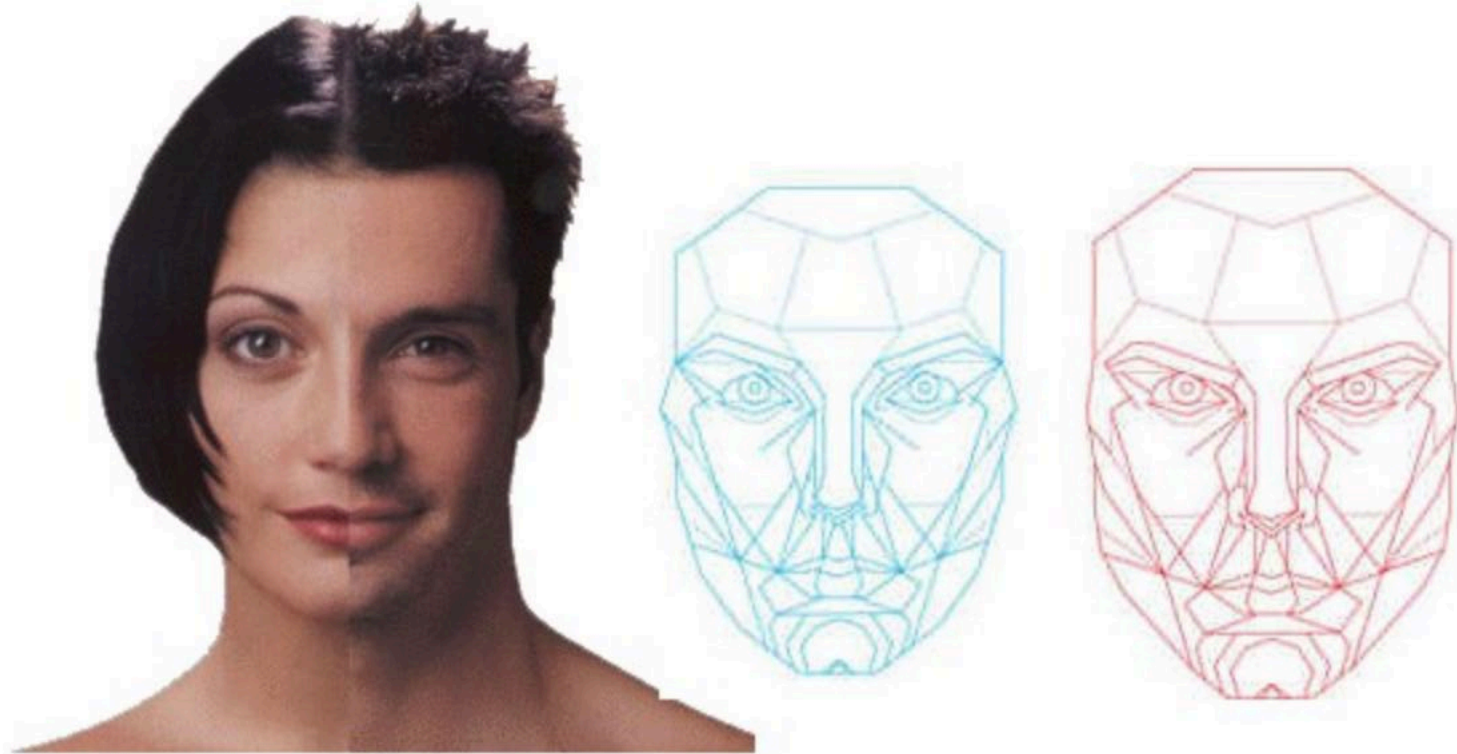


THE GOLDEN RATIO

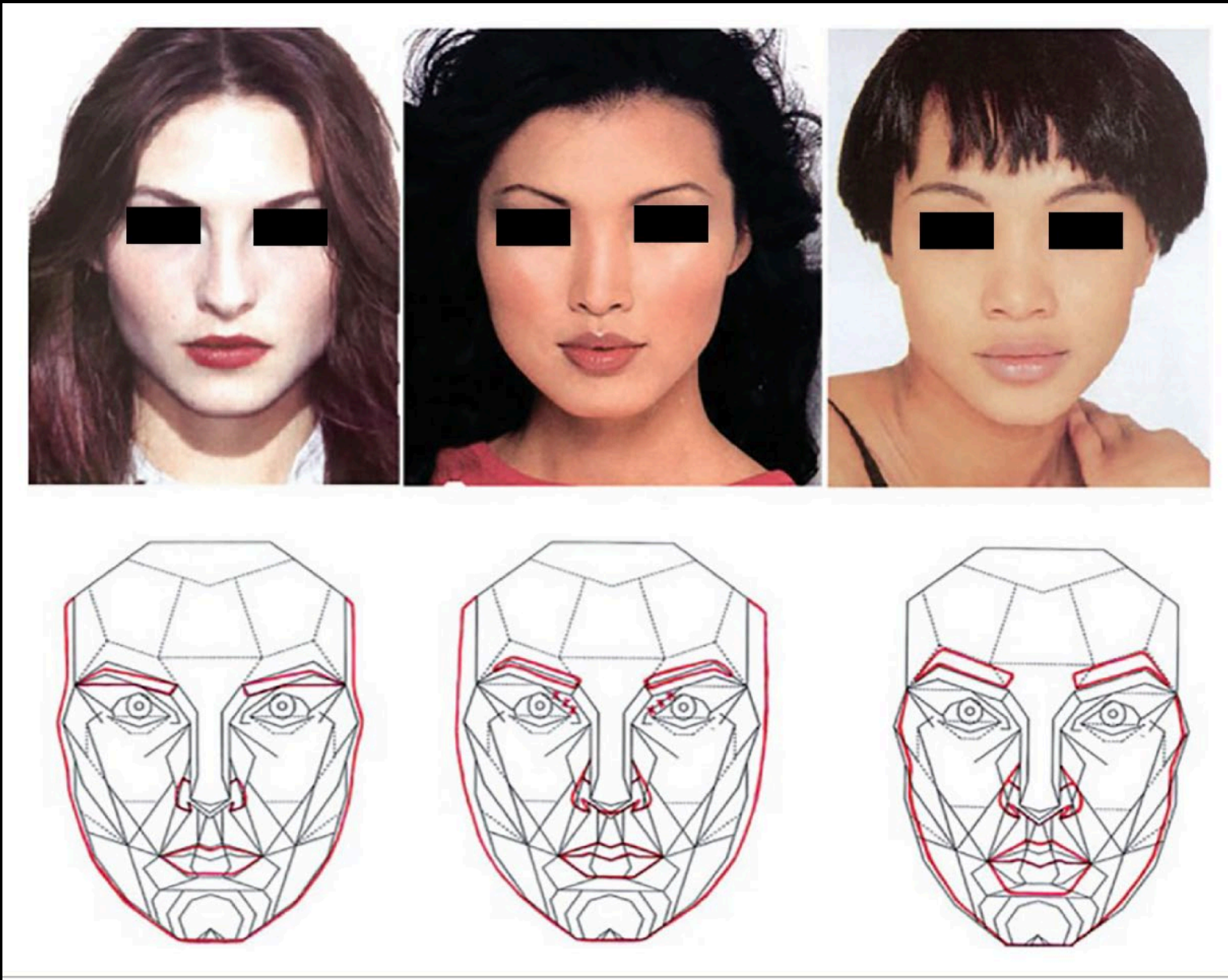




Face Variations by Sex



Face variations by sex

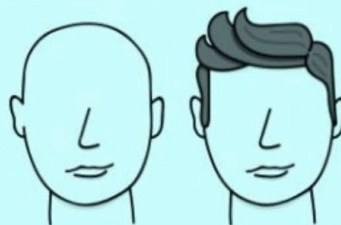


Ethnic variations of the phi mask. In: Sturm-O'Brien AK, Brissett AEA, Brissett AE. Ethnic trends in facial plastic surgery. *Facial Plast Surg* 2010; **26**: 69–74

HOW TO PICK THE BEST HAIRSTYLE FOR YOUR FACE SHAPE

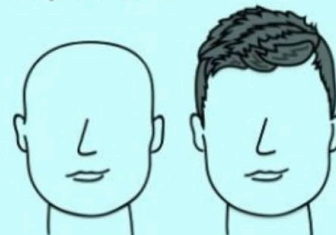
To find your optimal hairstyle, it's important to consider the shape of your face. This simple guide should help you find the right cut to complement your natural good looks.

ROUND



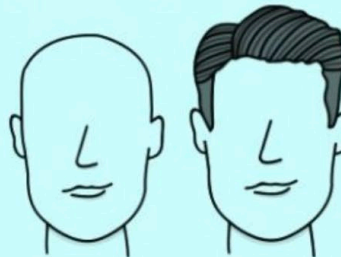
Square styles will offset roundness, as will height or volume. Keep sides shorter. Try an off-center part.

SQUARE



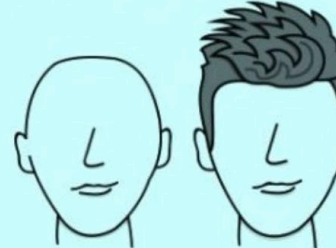
Short, tight styles nicely accentuate prominent bone structure. Add a little volume up top, and avoid parting down the center.

OBLONG



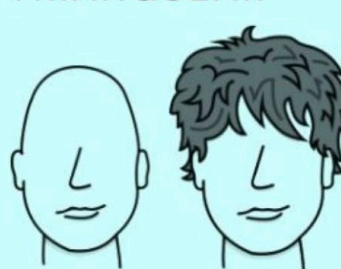
Styles that have the same length on the sides and top will offset the length of your face. Short and medium styles will work best.

DIAMOND



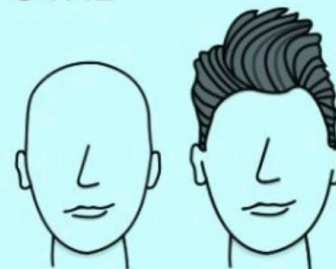
Try layered and high-volume styles to minimize wide cheekbones. As an alternative, swept bangs also work especially well.

TRIANGULAR



Try a mid-length style with an offset part or swept bangs; this will minimize forehead width.

OVAL



Most styles work because of the ideal symmetry. Try anything except bangs.



Understanding Motivation

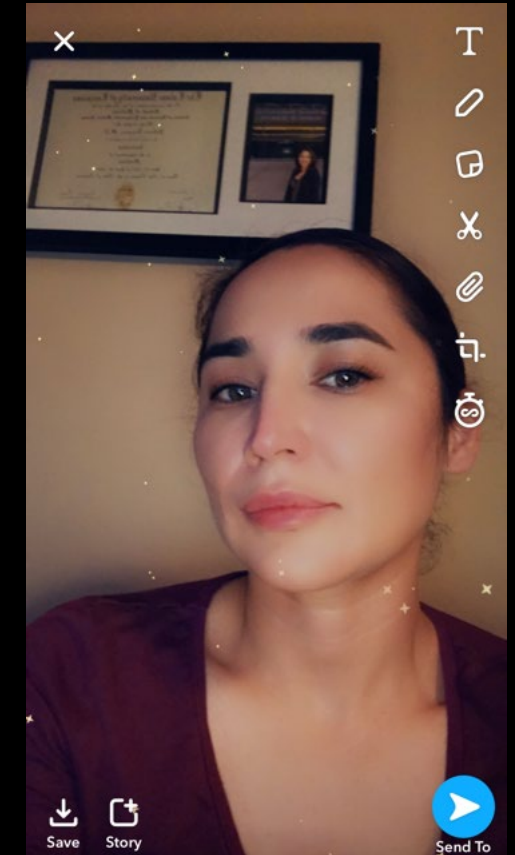
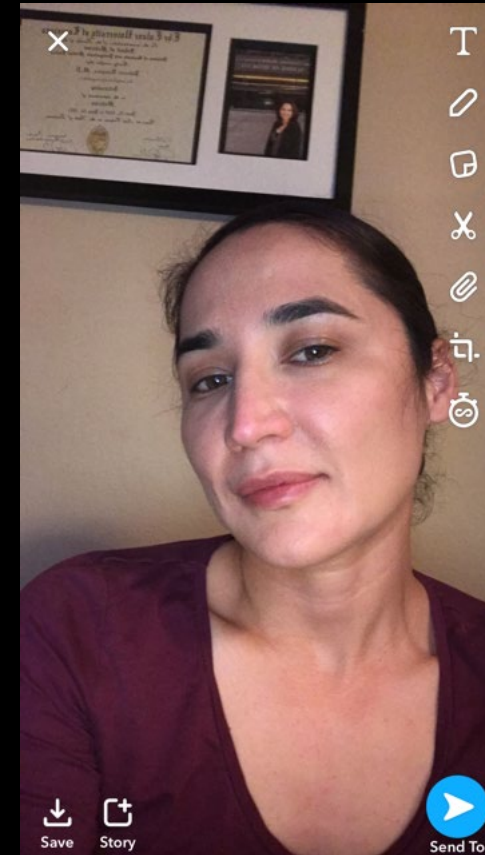
Red flags

- Unrealistic expectations (“Snapchat Dysmorphia”)
- Unreasonable demands
- Cosmetic concerns out of proportion to clinical examination findings
- Overfamiliarity with the physician/surgeon
- Overly and unreasonably critical of other colleagues
- Inappropriate flattery toward the physician/surgeon
- Rudeness to clinic staff
- Lengthy list of questions often derived from the internet
- The patient has already decided on the surgical procedure(s) he or she requires
- Impatience
- Late for appointments but still expects full consultation time
- Demand for surgery without respecting a period of reflection

The temptation to operate on or treat such a patient should be strongly resisted.

“Snapchat Dysmorphia”

- Survey at 2017 annual American Academy of Facial Plastic and Reconstructive Surgery survey found 55% of surgeons reported seeing patients who requested surgery to improve their appearance in selfies
- Frequent selfie viewing behavior correlated with **lower self-esteem** and **decreased life satisfaction**, which may lead to **body dysmorphic disorder**
- These findings highlight the adverse effects of social media on self-esteem and emphasize the need to better assess how social media use influences attitudes toward cosmetic surgery.



Understanding Motivation

- Multicenter prospective observational study
- Included participants (n=511) seeking cosmetic procedures from 2 academic and 11 private dermatology practices across the US
- Typical respondents were **female** (440 [86.1%]), **45 years or older** (286 [56.0%]), **white** (386 [75.5%]), and **college educated** (469 [91.8%]) and **had previously received at least 2 cosmetic procedures** (270 [52.8%]).
- Survey study about their motivation to seek cosmetic treatment prior to consultation
- Results
 - Most reported seeking procedures for an existing condition rather than preventative (most commonly citing a desire to look younger or fresher (83%))
 - More individuals stated that wanted to look better/prettier for themselves than for others (88.5%)
 - When asked whose idea it was to pursue treatment, 44% reported themselves and 23.5% the physician (only 2.3% stated idea came from spouse or partner)
- According to this study, most individuals seeking cosmetic procedures are **self-motivated** and **desire to treat existing skin problems** rather than prevent future skin conditions
- Understanding an individual's motivation can allow a clinician to better counsel an individual and set realistic expectations for desired procedures

CAUSES OF CUTANEOUS DEFECTS

Chronologic aging

- Loss of subcutaneous fat
- Gravity

Photodamage

- Degradation of collagen, elastin, hyaluronic acid and other components of the extracellular matrix
- Neoplastic changes

Trauma

- Disease
- Inflammation
- Surgery

Fat

A youthful look depends on having the right amount of facial fat in the right places. Redistribution, accumulation, and atrophy of fat lead to facial volume loss.^{1,2,4,5}

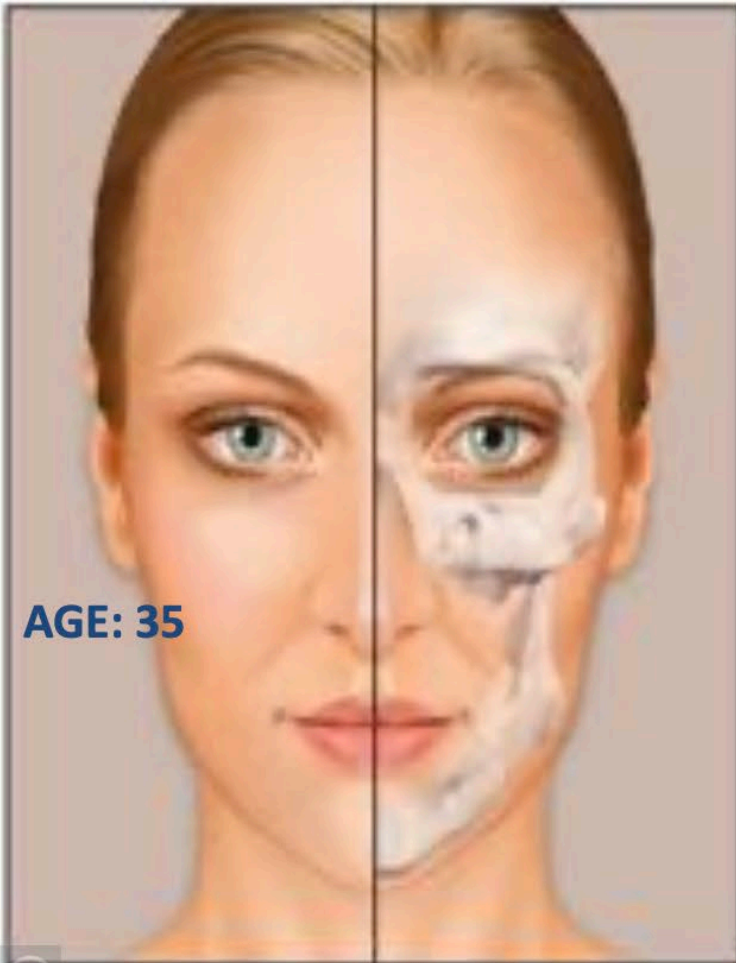


- Some areas lose fat. Examples are the forehead and cheeks.
- Other areas gain fat. Examples are the mouth and jaw.
- Modification of the fat pads leads to contour deficiencies.²⁻⁵

In addition, the areas of fat tend to become farther apart. Instead of a smooth, almost continuous layer, the fat pads appear as separate structures.⁴

Bone

There is a significant loss of facial bone with age.⁴ Aging of the craniofacial skeleton may be due to changes in the relative dynamics of bone expansion and bone resorption. Bone resorption leads to biometric volume loss.^{2,4}



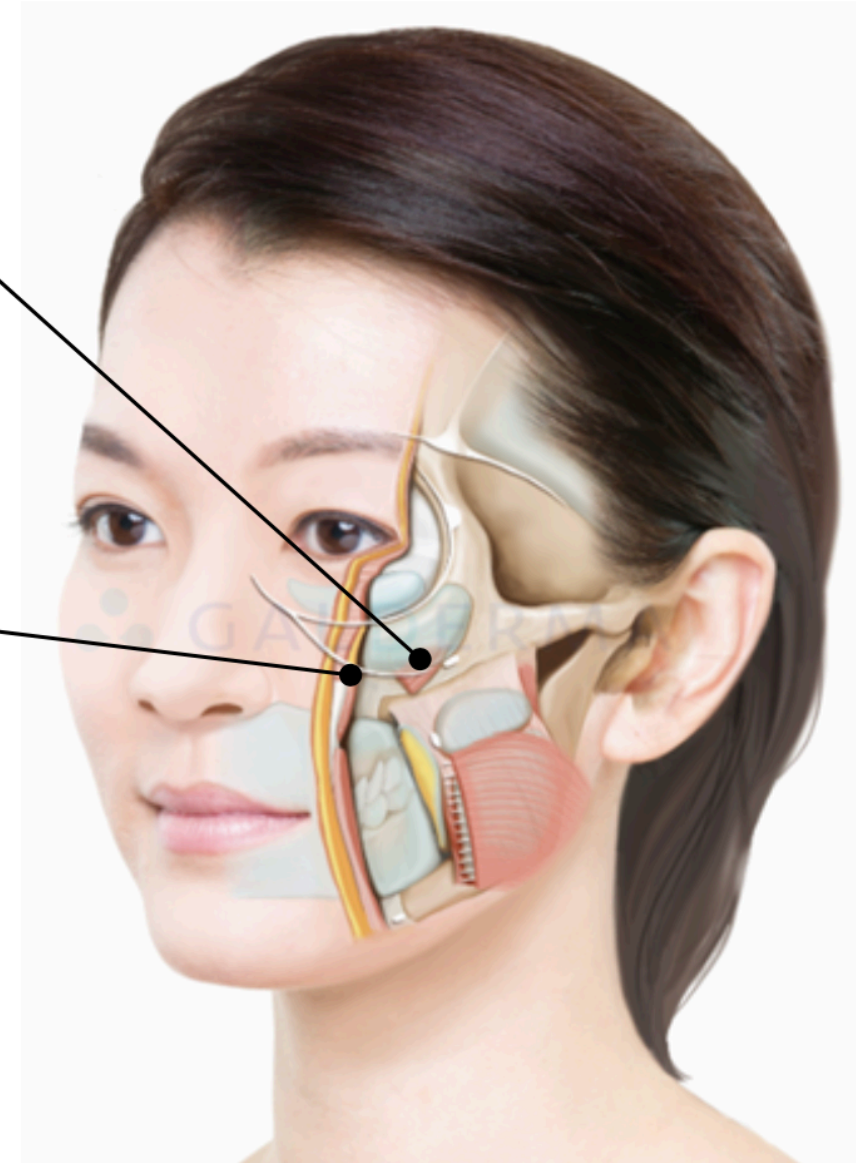
LIGAMENTS OF THE FACE

Zygomatic ligament

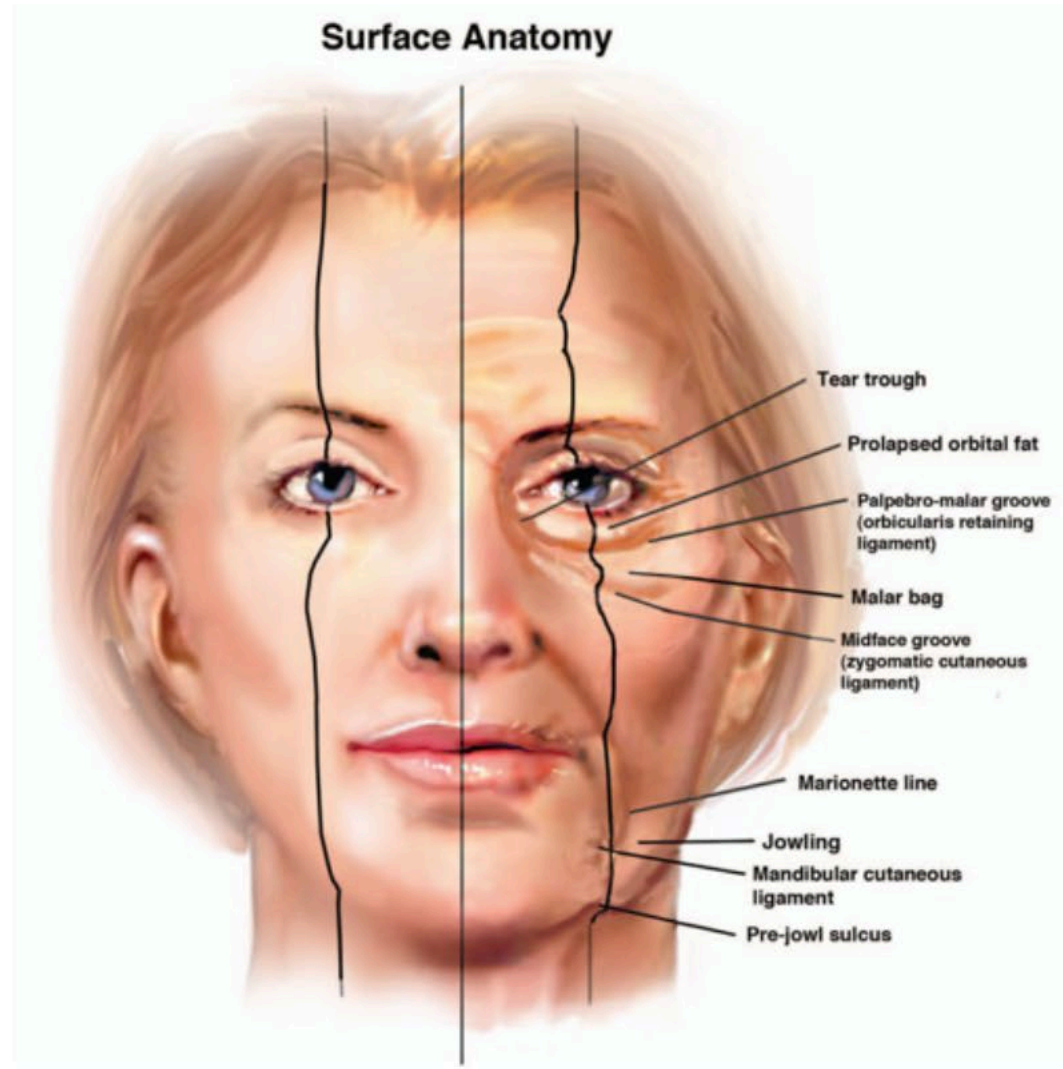
- Or McGregor's patch, is located posterior to origin of the zygomaticus minor muscle
- Connects the lower margin of the zygomatic arch with the skin

Zygomatic cutaneous ligament

- Originates from the periosteum of the zygomatic bone, proceeds along the lower margin of the orbicularis oculi muscle, and attaches to the skin on the anterior portion of the zygomatic bone
- The soft tissues in this area are maintained by this ligament, which droop with age and can result in the formation of a malar mound (or baggy lower eyelid)



Surface Anatomy



Interventions for the aging face

- **Resurfacing** (chemical peels, dermabrasion, ablative & nonablative lasers)
- **Redraping** (various pulling or lifting of the skin)
- **Relaxing** (chemodenervation with paralytic agents)
- **Replacement/Recontouring** (the use of fill agents for superficial and deep soft tissue augmentation)

Replacement and Contouring

SOFT TISSUE AUGMENTATION INDICATIONS

- Non-dynamic rhytides – nasojugal and nasolabial folds, jowls and marionette lines
- Volume deficits – lipoatrophy (associated with antiretrovirals, senescence), sunken temples, tear trough deformity, atrophic dorsal hands
- Building up volume – malar prominence, chin, eyebrow elevation
- Distensible scar
 - Acne scar
 - Traumatic/surgical scars
- Perioral – vermilion, vertical “bar code” lines, oral commissure
- Combination therapy
 - Multiple fillers
 - Paralytic agents (botulinum A toxin)



Fillers

Selecting the Appropriate Filler For Specific Facial Applications

Elasticity (G')

ability of a gel to resist deformation when pressure is applied



MORE

Gelatin: stiffer, resists deformation



LESS

Pudding: softer, more susceptible to deformation

Viscosity (n^*)

ability of a gel (in the fluid phase) to resist shearing forces



MORE

Peanut butter: thicker, more resistant to spreading

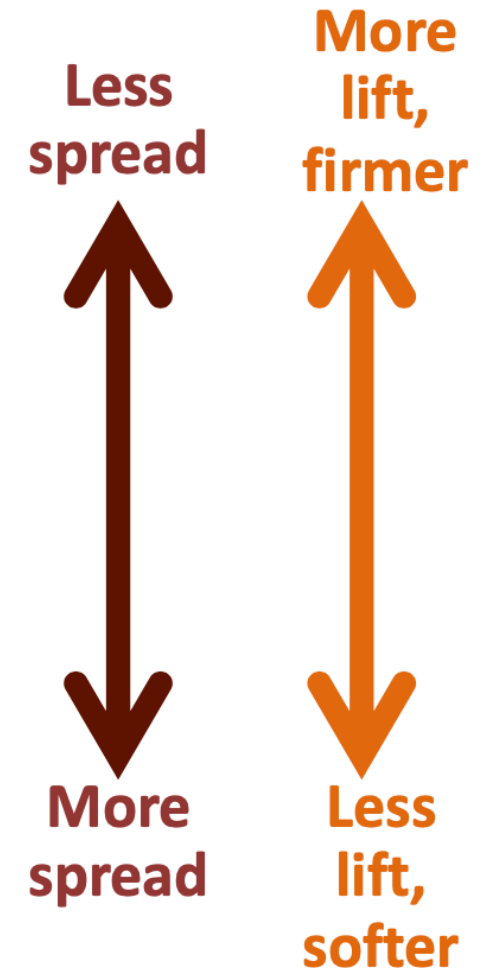


LESS

Room-temperature butter: easily spreadable

Elasticity & Viscosity Values

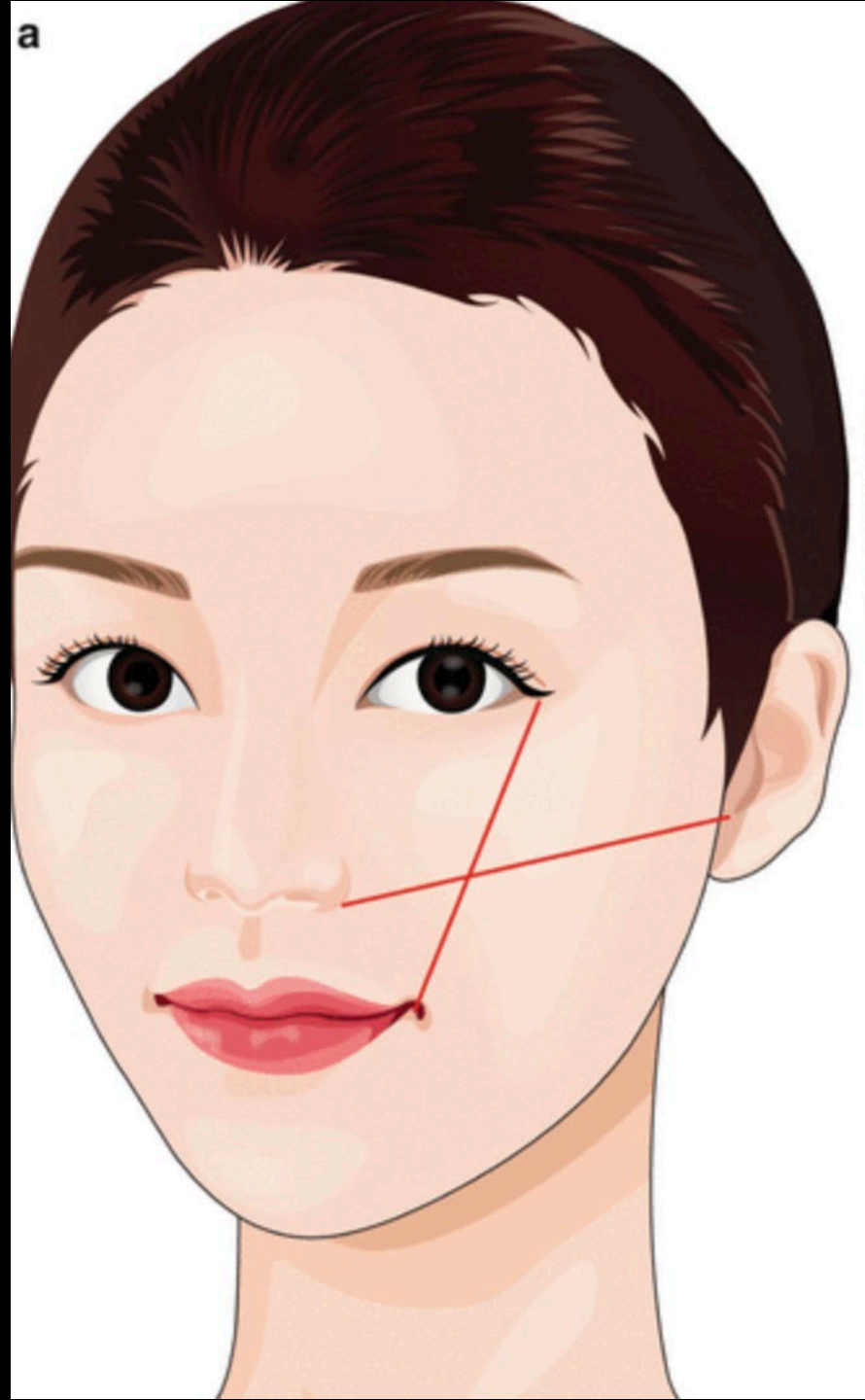
Product	Elasticity*	Viscosity*
Radiesse	1,407	349,830
Radiesse (+) integral lidocaine	1,165	310,305
Restylane-L	565	131,310
Restylane-Lyft	549	127,090
Restylane	514	119,180
Juvéderm Voluma	274	92,902
Juvéderm Ultra Plus XC	136	32,152
Juvéderm Ultra XC	111	27,034
Juvéderm Ultra Plus	75	17,699
BELOTERO BALANCE	30	9,217
Juvéderm Ultra	28	7,307



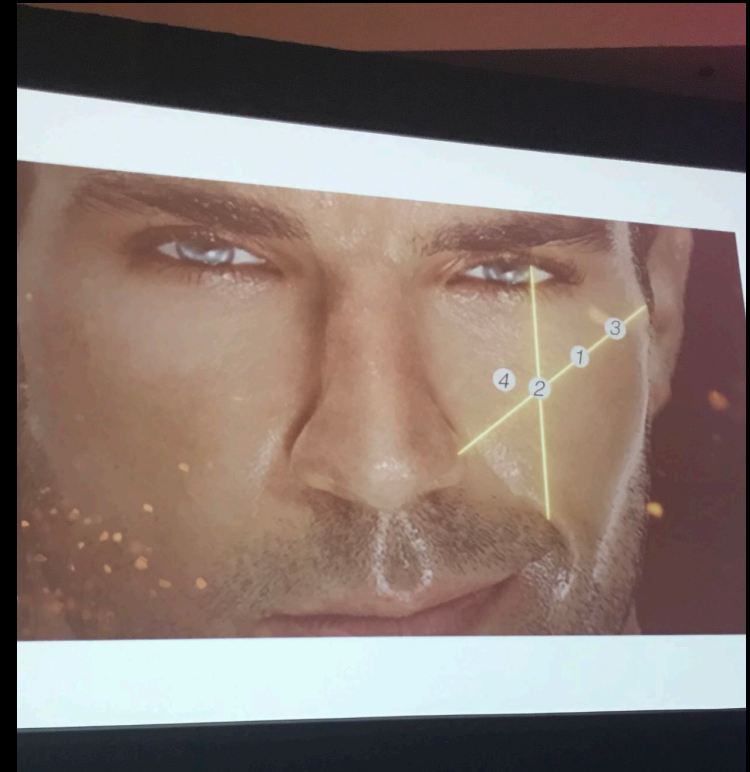
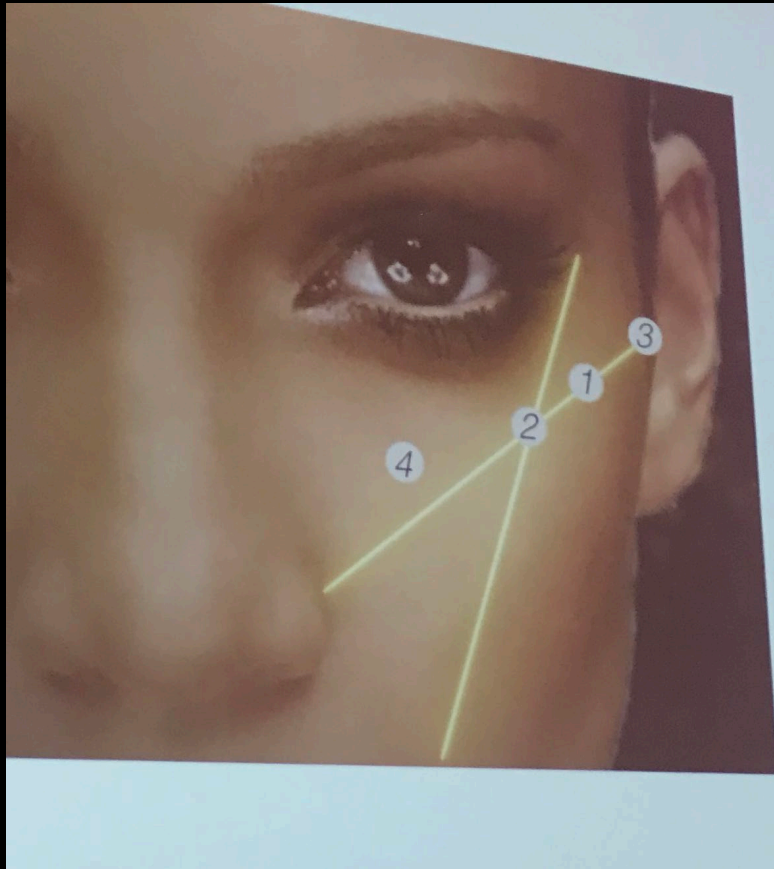
*All measured at 0.7 Hz (physiologically relevant for stresses common to skin).

Sundaram H et al. *Dermatol Surg.* 2010;36:1859-1865. Sundaram H et al. *J Drugs Dermatol.* 2012;11(8 Suppl):S12-S24. Data on file, Merz.

a



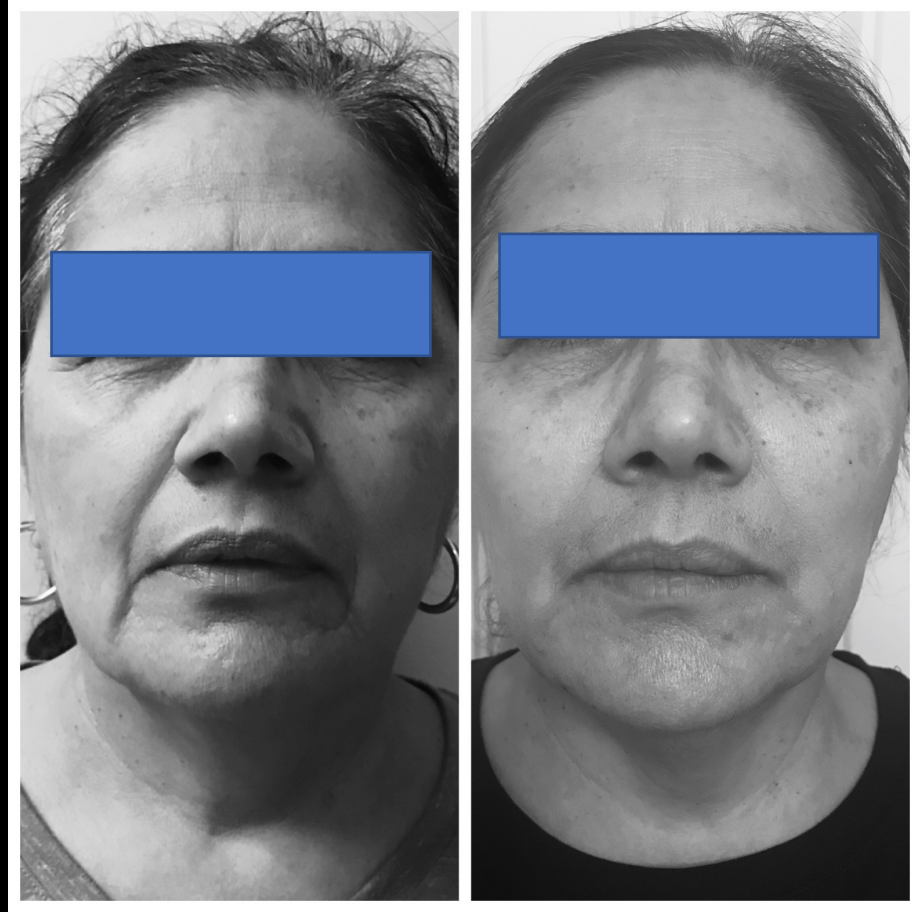
Malar prominence









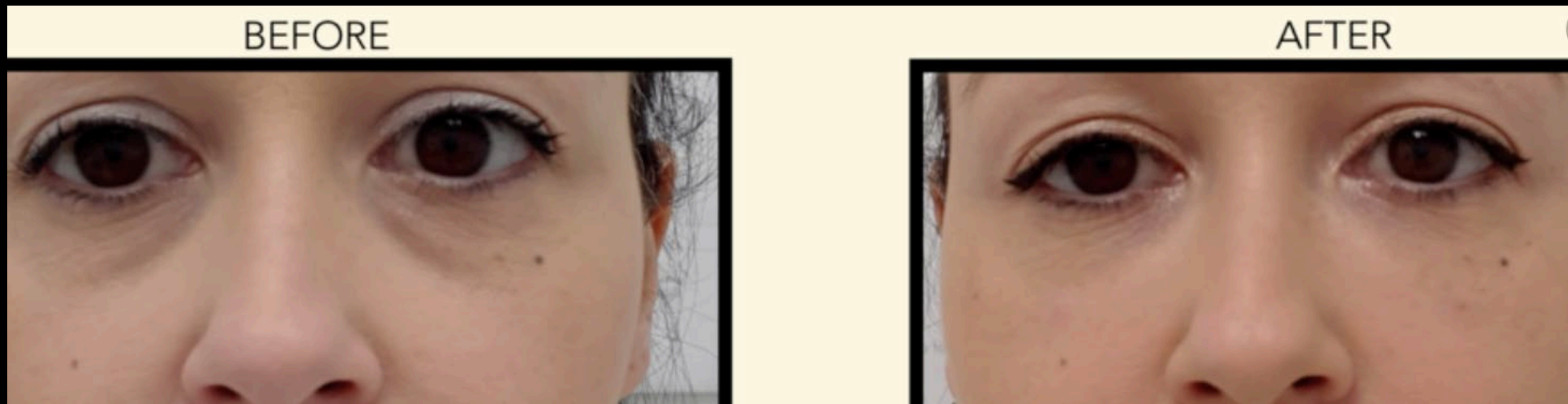




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Tear Troughs



Tear Troughs

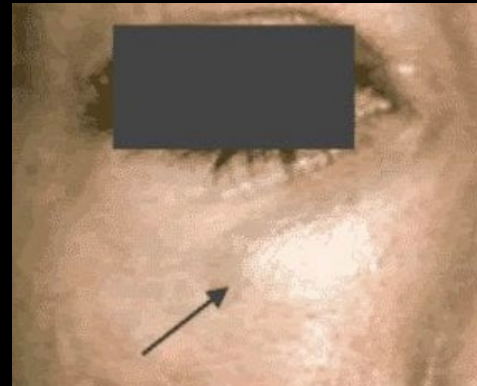


Common Tear Trough Problems

- Overfilled tear troughs



- Tyndall effect

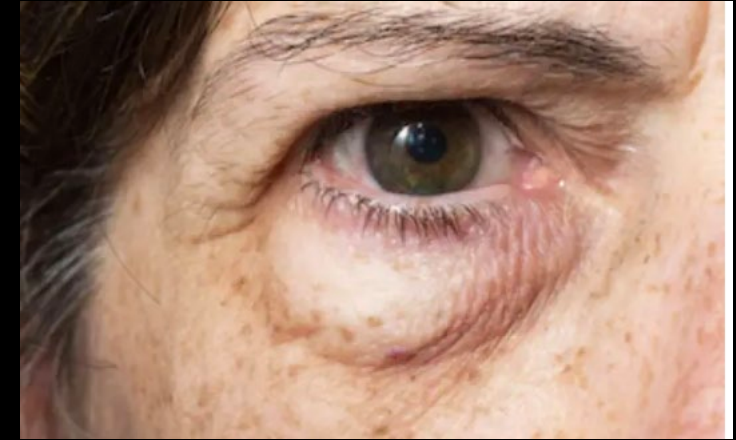


- Swelling under eyes after filler



Patients not suitable for Tear Troughs

- Patients with excess skin under the eye
- Patients with dark circles under the eyes



Lip augmentation



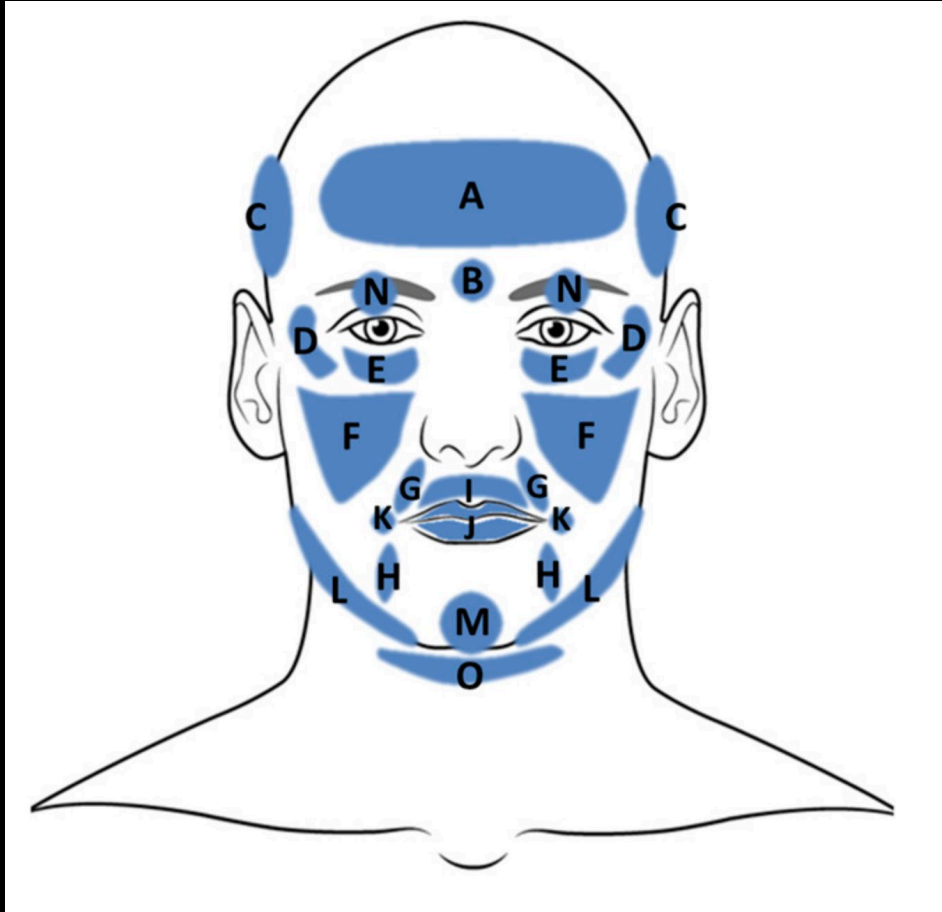
Lip augmentation



Lip augmentation

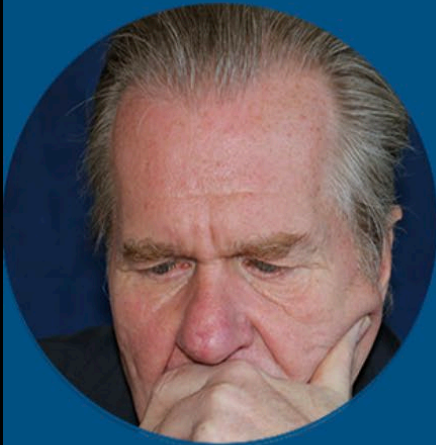


Facial Treatment Preferences Among Aesthetically Oriented Men



- Injectable-naïve but aesthetically oriented men aged 30 to 65 participated in online study (n=600)
- Respondents indicated how concerned they were by the appearance of 15 age-related facial features
- The correlation between the features of most concern and the areas of treatment priority was assessed.
- Crow's feet and tear troughs, are of most concern followed by forehead lines (74%), double chin (70%), glabellar lines (60%), oral commissures (55%), and chin (51%).

Top areas of concern in male skincare...



Hairline



Crow's Feet

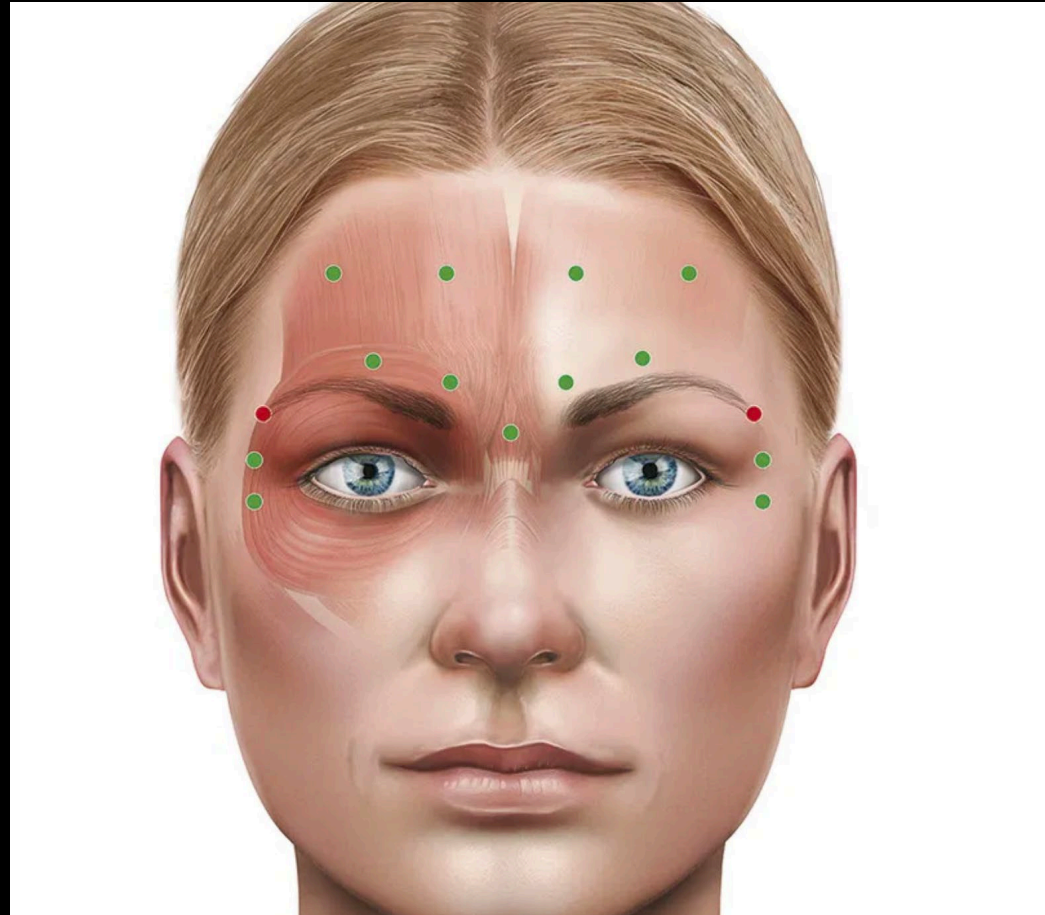


**Jawline/Double
Chin**

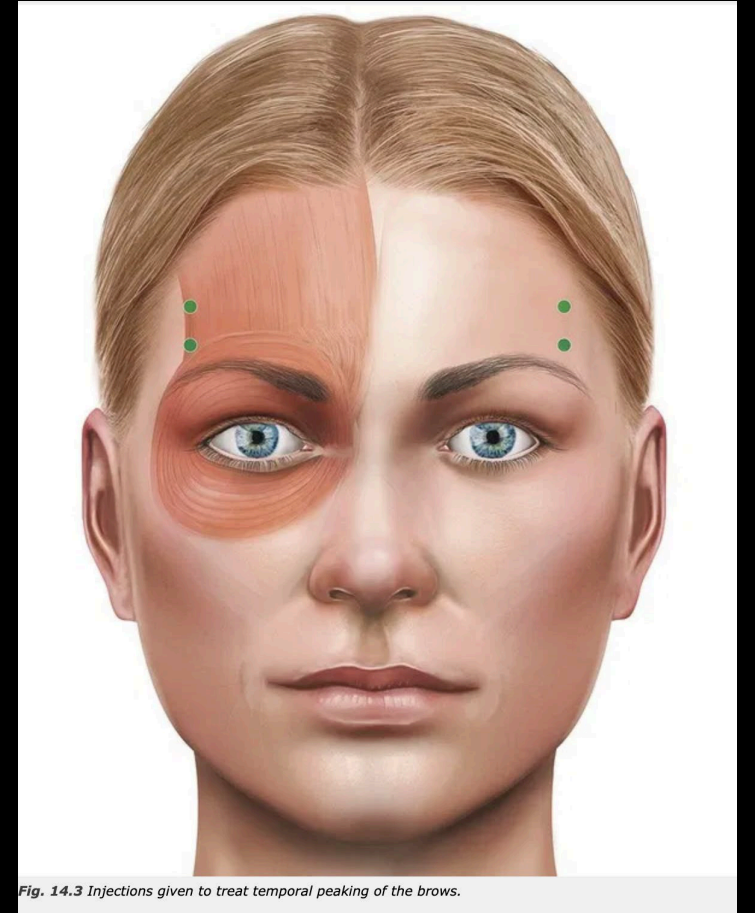
Relaxing with Botulinum Toxin (Botox)

- Botox causes chemodenervation of muscles by blocking acetylcholine release
- Injections of botulinum toxin type A (BoNT-A) that weaken or relax muscles can smooth hyperfunctional lines and change the contour of the face and neck
- Adjunctive use with laser resurfacing or soft tissue augmentation is beneficial
- Typically **last months** and **may increase with subsequent injections**





“Spock” Eyebrows



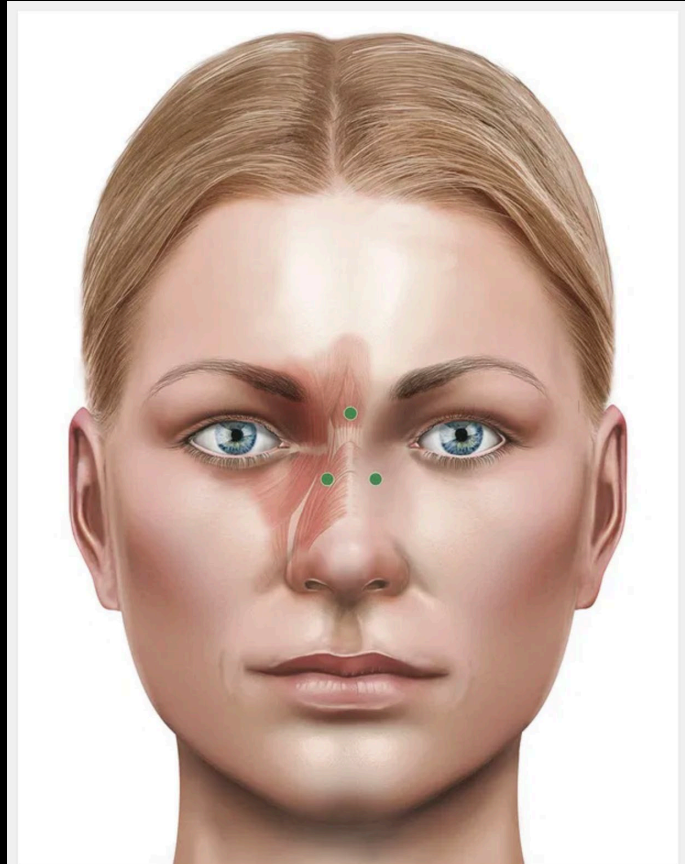
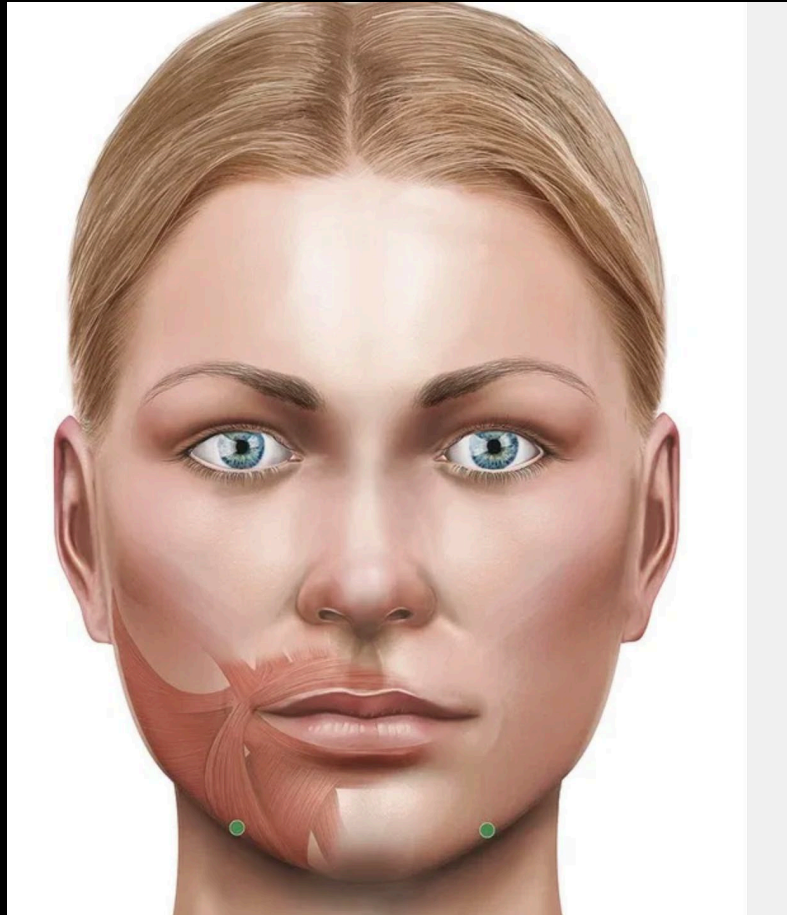
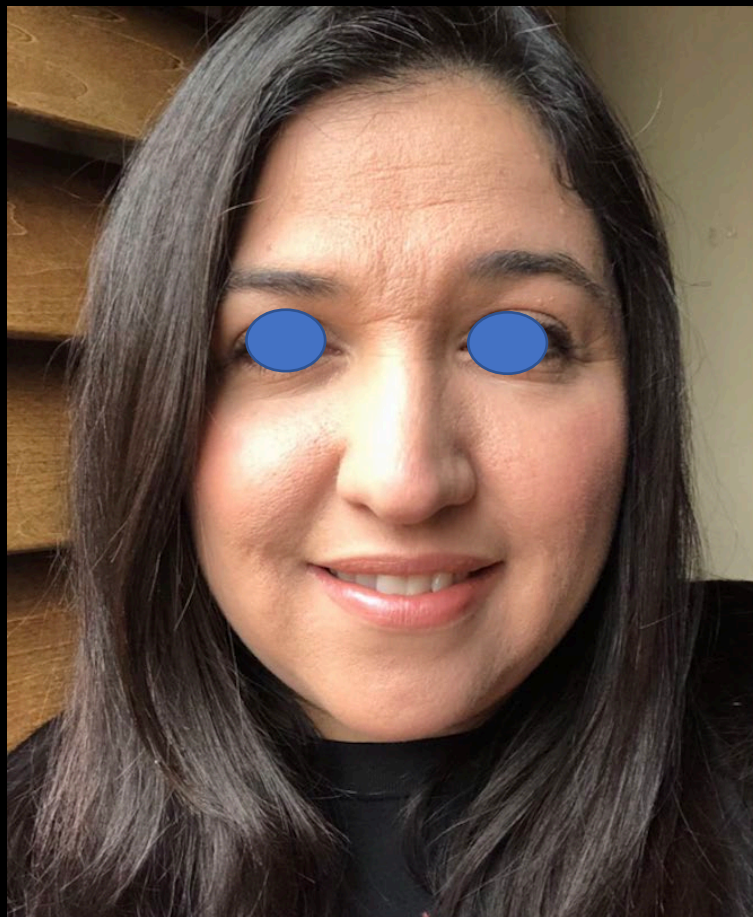


Fig. 14.4 The typical sites of injection for the treatment of "bunny lines."



Frontalis in patient with Brow Ptosis





Consideration for specific populations

- Skin of color
- LGBT

Skin of Color (SOC): Myths and Knowledge Gaps in the Aesthetic Treatment SOC patients

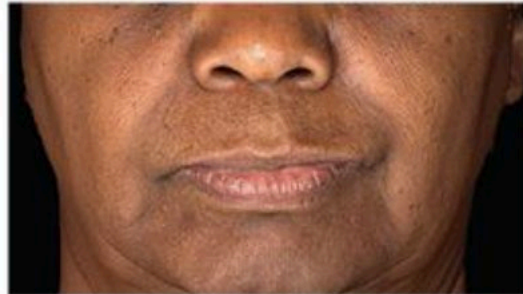
- Surgical and nonsurgical cosmetic procedures in the US increased by more than 30% between 2010 and 2016, with the percentage of procedures performed in non-Caucasians increasing from 19% to 25%
- Despite increasing interest in aesthetic procedures from individuals with SOC, only a few treatment guidelines or recommendations touch on race or ethnicity in discussions of safety and efficacy
- Dermatologists and plastic surgeons may thus be hesitant to treat patients with SOC
- Further, widespread and often unsubstantiated anecdotal information regarding treatment preferences and outcomes in people with SOC has encouraged myths about skin care and aesthetic treatment that may prevent this population from receiving the best possible care

Knowledge Gaps in the Medical Community

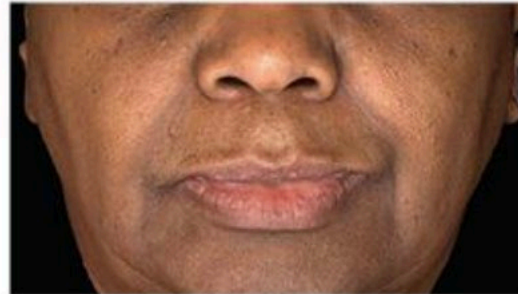
True or False: Darker-Skinned Patients of African Descent Do Not Seek Injectable Filler Treatment of the Lips

FIGURE 1. Photos of a 74-year-old black female with Fitzpatrick skin phototype VI who received a total of 2.4 mL HYC-24L (Juvéderm Ultra XC) at initial and touch-up treatment in her upper and lower lips, oral commissures, and philtral columns. Patient is shown before treatment (A) and at 3 months after treatment (B). *Reprinted with permission from Allergan plc, Dublin, Ireland.*

(A)



(B)



True or False: Melasma Is a Minor Cosmetic Concern With No Effective Treatment Options Beyond Sun Protection and Periodic Use of Hydroquinone

FIGURE 2. Melasma in a patient with skin of color before (A) and after (B) combination therapy (chemical peels and hydroquinone 6%).
Images published with permission from P. Grimes.



True or False: Patients With SOC Should Not Undergo Surgical Procedures or Even Receive Nonsurgical Injectable Filler Treatment Because There Is a Risk of Developing Hyperpigmentation



True or False: Patients With SOC Have a Substantial Risk of Developing Keloids With Injectable Filler Treatment or Surgery

- No keloids were reported in patients with SOC in post-approval studies of injectable filler treatments in a long-term study comparing patients with Fitzpatrick skin phototypes I through III versus IV through VI, or in a case review of 60 patients that included 20 patients with Fitzpatrick skin phototypes IV through VI.
- Clinical experience suggests that dermal injury from 27-gauge needle puncture does not appear to be associated with significant keloid risk.

True or False: Racial and Ethnic Groups Are Relatively Homogeneous With Respect to Their Facial Characteristics and Aesthetic Concerns

- While some common observations can be made with racial/ethnic groups, it is important to recognize individual variations and the diverse spectrum of features that can be observed within the categories of race, ethnicity, and skin types.
- Addressing each patient's unique concerns and facial characteristics individually is crucial.

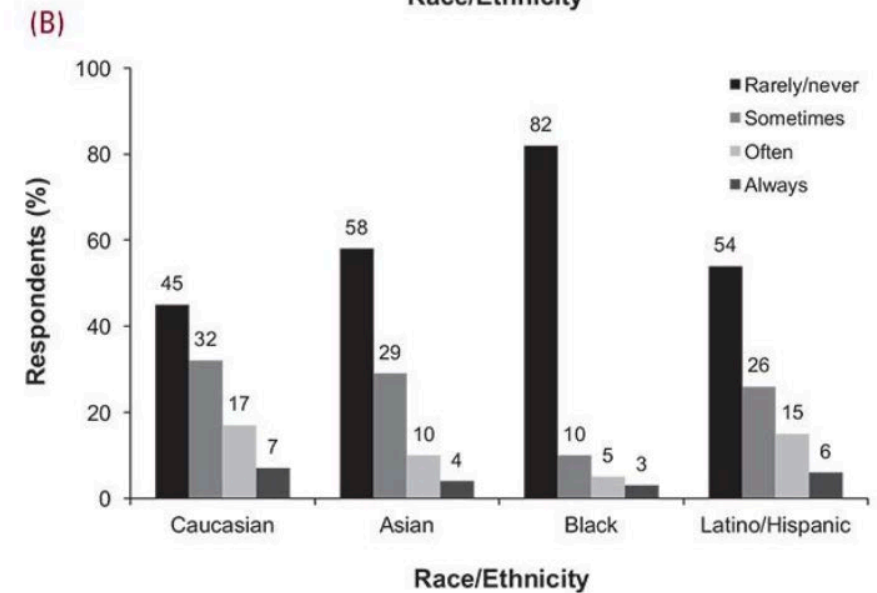
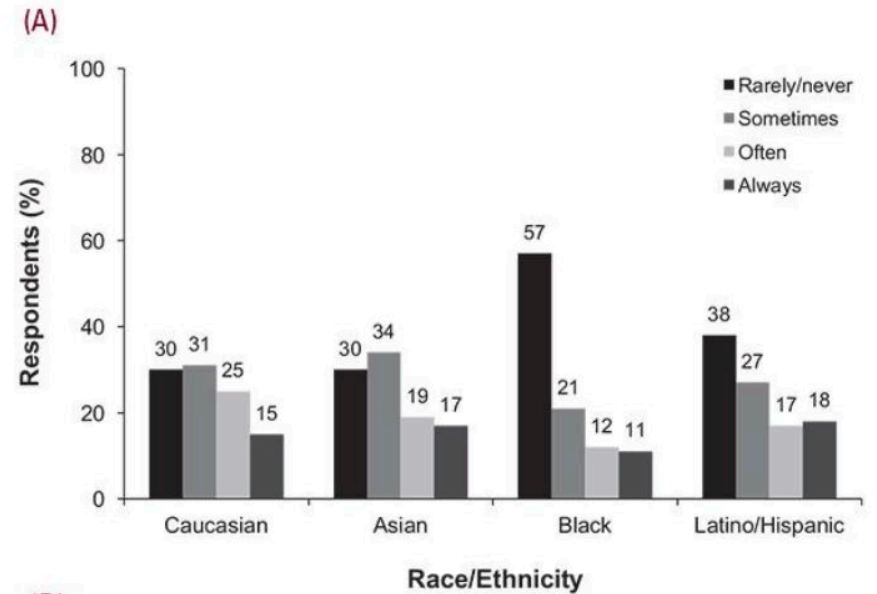
Myths held by patients

Myth: Individuals With Darker Skin Do Not Need to Use Sunscreen

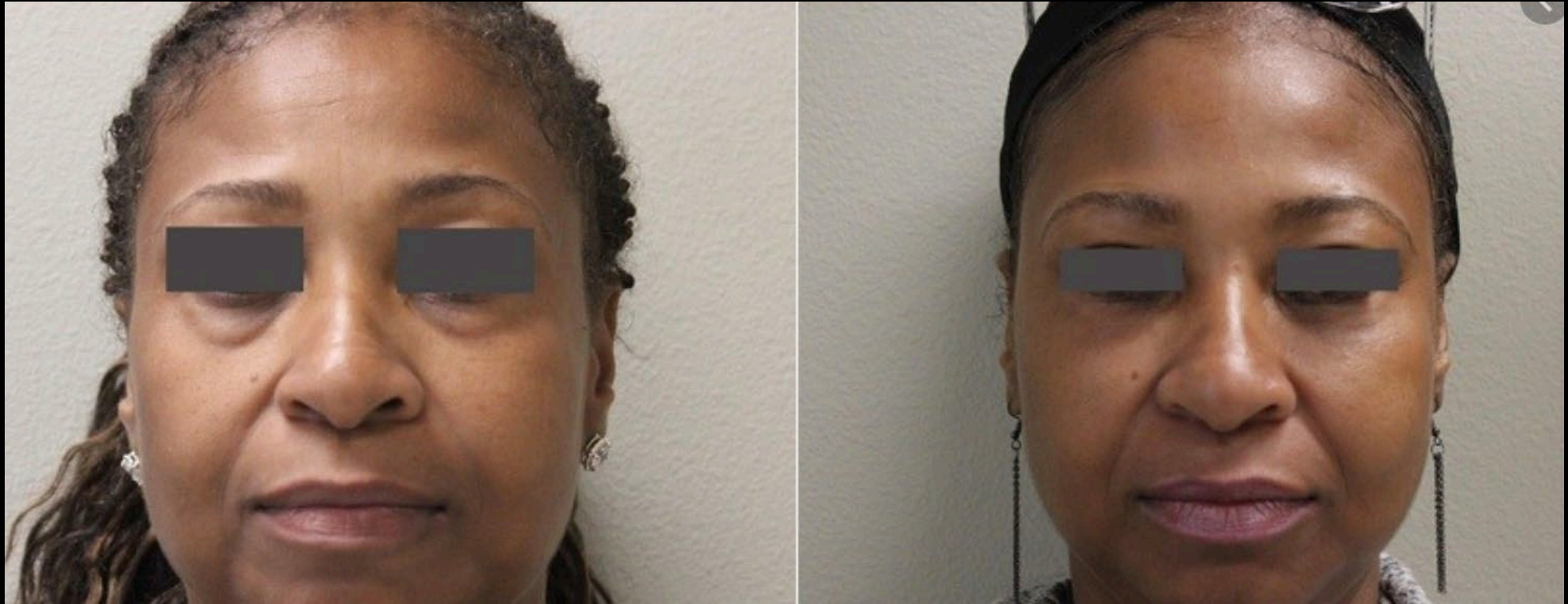
FIGURE 4. Superficial exfoliation and erythema from a sunburn in a patient with Fitzpatrick skin type V. Image published with permission from V. Callender.



FIGURE 3. Reported use of sunscreen by women (A) and by men (B) in a recent facial aging study (N=1048), by race/ethnicity.^{39,40}



- Myth: As Dark Skin Protects Against Age-related Lines and Wrinkles, Dermal Fillers, and Neuromodulators Are Not Necessary or Useful for Patients With Darker Skin



- Myth: Laser Treatments Cannot Be Used on Dark Skin
- Depending on the type of procedure, risk of pigmentary alteration can be minimized by using **longer wavelength lasers, lower fluences, lower treatment densities, and epidermal cooling techniques.**
- For most laser procedures, test spots (to guide optimal setting selection) or conservative treatment settings are useful approaches to reducing the risk of pigmentary complications in SOC.
- Spot tests are strongly advised
- Patients should be counseled regarding the risk of pigment changes with laser treatment and about possible corrective treatments, if needed.
- For procedures involving injury to the dermis, assessing the risk of keloid formation based on degree of injury and personal or family history of keloids is paramount.

- Myth: Only a Medical Provider With SOC Can Understand the Nuances of Treating Patients With SOC

TABLE 1.

Recommended Strategies for the Successful Treatment of Patients With Skin of Color	
Consider-ation	Recommended Strategy
Overall	Maintain an up-to-date understanding of issues related to treatment
	Understand patient concerns and expectations in light of ethnic background and physical characteristics
General skin care	Counsel patients to use sunscreen (SPF of ≥30) and explain the risks associated with not using sunscreen. Recommend vitamin D supplementation in patients who use sunscreen
	Encourage the use of moisturizers and washing the face and neck at least nightly, followed by a light cleanse or rinse in the morning, especially for patients with conditions that may compromise the skin barrier
Treatment of melasma	Choice of effective pharmaceutical and cosmeceutical agents, although topical hydroquinone 4% remains the standard of care
	Recommend sunscreen use as a component of any treatment regimen for melasma
Procedural	Collect a thorough medical history to understand the risk of adverse reactions in individual patients
	Provide the patient with an accurate understanding of the risks associated with the procedure
	When performing laser treatments, consider using longer wavelength lasers, lower fluences, lower treatment densities, and epidermal cooling techniques to prevent tissue damage
	Use test spots before carrying out laser treatments to determine how the skin may respond (strongly recommended for any new laser device acquired by a practice)
	When using dermal fillers, consider adjustments in injection technique (eg, deeper placement of fillers in the dermis, avoiding serial epidermal puncture trauma) that may limit the risk of PIH
	Discuss posttreatment care with the patient and explain how following recommendations may reduce the risk of adverse events

PIH, postinflammatory hyperpigmentation; SPF, sun protection factor.

LGBT

- Approximately 10.1 million adults in the United States (4.1%) identified as LGBT.
- Over 8 million (3.5%) adults identified as lesbian, gay or bisexual and 1.4 million (0.6%) adults identified as transgender.
- Over 19 million (8.2%) adults reported ever having engaged in same-sex sexual behaviors.

Yeung H, Luk KM, Chen SC, Ginsberg BA, Katz KA. Dermatologic care for lesbian, gay, bisexual, and transgender persons: Terminology, demographics, health disparities, and approaches to care. *J Am Acad Dermatol*. 2019;80(3):581-589.

Healthcare Disparities Among LGBT Persons

- LGBT individuals face substantial disparities in physical and psychosocial health conditions
- Disparities in health risk factors, barriers in healthcare access, discrimination, and minority stress may contribute to LGBT health disparities
- The minority stress model proposes that prejudice and stigma can generate chronic psychosocial stressors that mediate health disparities

Yeung H, Luk KM, Chen SC, Ginsberg BA, Katz KA. Dermatologic care for lesbian, gay, bisexual, and transgender persons: Terminology, demographics, health disparities, and approaches to care. *J Am Acad Dermatol*. 2019;80(3):581-589.

Caring for Transgender Patients

- Gender dysphoria: Stress derived from an incongruence of gender identity and physical sex
- Can be related to societal attitudes about gender identity and can be treated via gender transition
- Many patients may undergo **gender-affirming medical procedures** and medical therapies and **may seek your advice**
- It is important to note that no two patients are alike
- The goal is to increase their quality of life and decrease their gender dysphoria
- Cosmetic treatments have been shown to increase quality of life in these patients.

Figure 2. Example of male-to-female lip augmentation using fillers in this 42-year-old transwoman. (A, C, E) ...



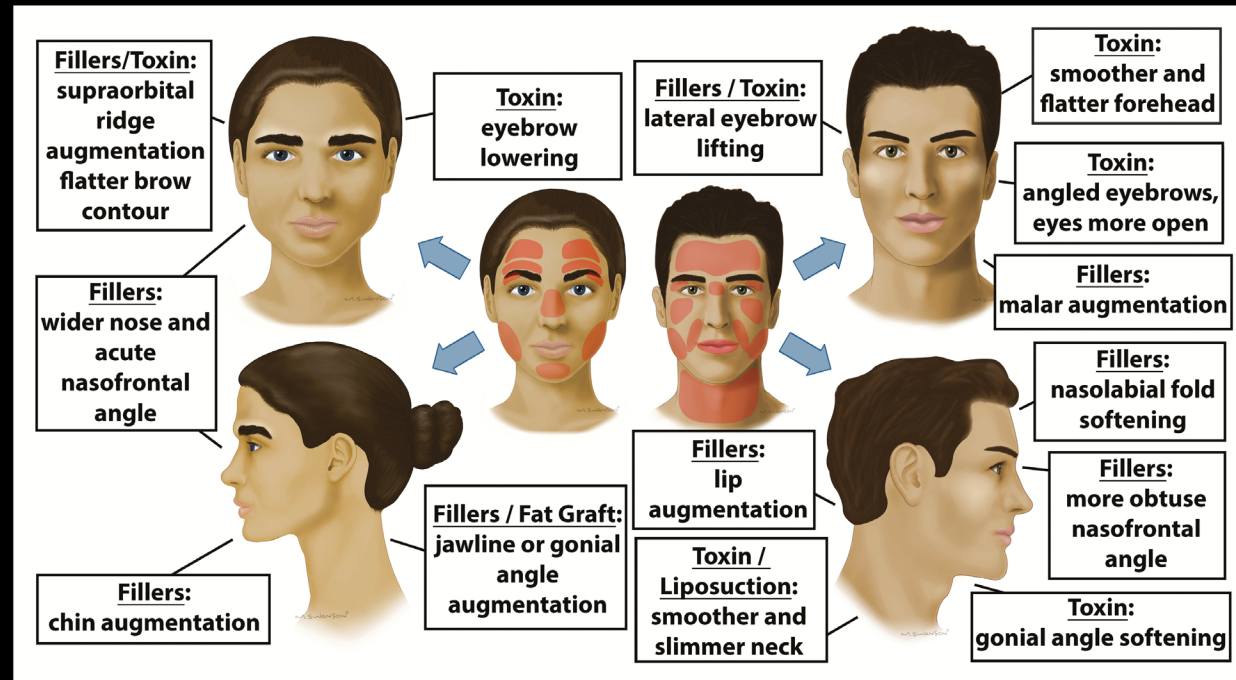
Figure 3. Example of brow lift using botulinum toxin in this 51-year-old cisgender woman. (A) Preinjection image and ...



Figure 4. Example of male-to-female masseter reduction using botulinum toxin in this 36-year old transwoman. (A, C, E, ...



Figure 8. Composite complete face modifications for transgender patients. Right: ideal male face showing injection ...



Aesthetic Treatments for Transgender Patients

- Important tool because they can decrease gender dysphoria and improve quality of life.
- These aesthetic procedures are considered gender affirming, **not cosmetic**, and can augment the effects of hormonal therapy.



Questions?