Evolutionary Perspective

The Subliminal Difference: Treating from an Evolutionary Perspective

Sir:

The meaning of beauty, although ethereal in conception, has served as fodder for debate for some of history’s greatest intellectuals. Although philosophers from Confucius to Plato have postulated into its metaphysical realm, perhaps a more utilitarian perspective has greater relevancy to aesthetic medicine. Beauty, from an evolutionary perspective, is an adaptive trait integral to our species’ survival.

The subliminal difference technique consists of nonsurgical treatments that highlight the eyes and de-emphasize the lower third of the face (Fig. 1). The upper one-third of the face was injected with onabotulinumtoxinA, elevating the lateral third of the brow, reducing forehead wrinkles, and opening the eyelid aperture, causing a subconsciously projected message of friendliness and fertility. The eyelashes were treated with bimatoprost, further enhancing the eyes. Calcium hydroxylapatite in the cheeks pedestals the eyes and draws attention away from the lower third. OnabotulinumtoxinA into the masseters further deemphasizes the lower third by narrowing the width of the mandible, allowing the lips, which are subtly augmented with hyaluronic filler, to be further noticeable. The skin was homogenized, plumped, and toned following fractionated carbon dioxide treatment. The result is a face that conveys femininity, youthfulness, and beauty while remaining subtle, natural, and within the context of her age.

Understanding the subtleties of beauty through the evolutionary lens in which it was shaped is paramount to treatment. Unfortunately, we perhaps spend a disproportionate amount of time on technique, sometimes to the disregard of knowing what makes someone attractive and why. In its most basic essence, beauty serves as a subconscious form of communication, signaling our health, vitality, and ability to reproduce. However, obvious cosmetic interventions may be counterproductive, interfering with the subconscious message.

Facial characteristics are processed in primitive neural pathways in the amygdala and posterior cingulated cortex. Emphasizing specific facial characteristics or increasing symmetry through nonsurgical interventions can result in a more favorable first impression. These slight yet perceivable differences are important throughout nature, as more symmetrical individuals have faster growth rates, higher fecundity, and better survival rates.

The eyes also contain an enormous amount of evolutionarily relevant information, exemplified by the perceivable pupillary dilation of sexually aroused female subjects. A narrow, smaller lower third is a sexually defining dimorphic trait that maintains focus on the eyes. The preference for women with large eyes, small chins, and a minimized lower third is evolutionarily preserved and consistent across cultures. A smaller facial framework also highlights the lips, which serve an important evolutionary role for signaling female fertility.

Humans look for contrast, and to the brain, heterogeneous skin with dark spots and wrinkles suggests aging and disease. Thickened, homogenous skin is evolutionarily preferred and has been correlated to attractiveness, health, and youth.

As cosmetic providers, we have many tools available to us. At times, it may be most appropriate to use surgical treatments and at other times to use nonsurgical and sometimes nothing at all. Understanding beauty within the context of an evolutionary adaptive trait puts our patients’ goals in perspective. Using evolutionary science as our roadmap, the destination is more clearly defined.

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PATIENT CONSENT
The patient provided written consent for the use of her images.

REFERENCES
Gender Differences in Facial Paralysis Reanimation

Sir:

Facial paralysis reanimation is influenced by several factors, of which denervation time and muscle atrophy are of high relevance. Thus, for paralysis of short duration (<6 months), cross-facial nerve grafting is recommended because it achieves a harmonious and synchronous smile with the nonparalyzed side, although contraction may be weak. For cases between 6 months and 2 years, in which cross-facial nerve grafting alone is not advisable because of the high risk of developing irreversible muscle atrophy while the axons reach the paralyzed side, Terzis introduced the “babysitter” procedure, with very good results.1 Finally, long-standing cases (i.e., >2 years) are best treated with muscle transfers. In our experience with treating facial paralysis, we have come to observe that gender also plays an important role in reanimation. We have seen that women defend better from injury and thus are more resistant than men to denervation and muscle atrophy. Several studies performed in animals have demonstrated that female subjects resist neural injury better and regenerate faster than male subjects.2,3 Sex hormones (i.e., progesterone) might be key in this phenomenon. These observations have led us to mod-

Fig. 1. Baseline (left), 12-month (center), and 18-month (right) photographs of a 30-year-old woman undergoing treatment with onabotulinumtoxinA in the brow and masseters, 0.03% bimatoprost, calcium hydroxylapatite fillers in the cheeks, hyaluronic filler in the lips, and fractionated carbon dioxide treatment. The photographs were obtained over 18 months, in which the patient’s weight remained constant.

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