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HYPERHIDROSIS

Sir:

The letter entitled "A Simple Procedure for Axillae Involved with Hidradenitis" by Mangus,¹ which appeared in the April 1, 2002, issue of *Plastic and Reconstructive Surgery*, merits comment. The disorder described by the author was that of marked perspiration from the axillae and hands of a 16-year-old girl. These findings are consistent with a diagnosis of hyperhidrosis, not of severe hidradenitis suppurativa, as stated in the report.

The distinction between the two conditions is more than semantic, as they differ in their pathogenesis, clinical appearance, course, and, in large measure, treatment. Subcutaneous curettage of the axilla, as recommended by the author, has previously been reported for the treatment of axillary hyperhidrosis.² However, the use of this modality in the treatment of hidradenitis suppurativa would likely be injudicious.

Edgar Altchek, M.D.
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REPLY

Sir:

Dr. Altchek's observation is completely correct, and it is obvious that what I was discussing in my publication was hyperhidrosis and not hidradenitis suppurativa. This reminds me not to dictate letters concerning possible publications during office hours! Dr. Altchek's observation coincides precisely with my intended suggestion for curettage as the effective means of treatment for hyperhidrosis.

Recently, I had a young, moderately obese woman come in with hidradenitis suppurativa of the axillae and inguinal areas. Of course, I turned her away as a noncandidate for curettage because of the obvious possible severe complications and spreading of the infection following such treatment. I certainly appreciate Dr. Altchek's letter and the opportunity to share his observations. If the correction can be made in your publication, with my apologies, I would certainly appreciate it. Obviously, my suggestions for curettage are related only to hyperhidrosis.

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A CLINICAL DEFINITION OF AN IDEAL NASAL RADIX

Sir:

In the April 1, 2002, issue, McKinney and Sweis¹ propose a system of soft-tissue measurements that is intended to provide young, inexperienced plastic surgeons with a guide in establishing the "ideal" nasal radix. The guidelines used for radix designation include the nasal length, projection, height at rhinion, and height at radix. In the Discussion following the article, Daniel² points out the sobering realization that these landmarks may often be abnormal in the evaluated patient and are thus not appropriate guidelines. Furthermore, although the authors propose measuring the various parameters in situ during the clinical visit, would it seem more convenient for the inexperienced surgeon to complete measurements and formulate an operative plan from photographic images so that he or she is not rushed? As such, the proposed definition of radix height as measured from the medial canthus may not be as helpful, as it is not identifiable on lateral facial profile images. More useful landmarks for radix height determination may include the radix projection anterior to the corneal plane³ and the radix setback from the glabella,⁴ which can be assessed from lateral profile photographs.² Finally, the authors ignore discussion of the nasion height (horizontal position) and the nasion level (vertical position), both of which have been designated as critical components of establishing radix position.³⁻⁸

To date, the desired nasion height and level have been subjectively and variably described. The nasion height has been described using several anatomical landmarks with variable ranging parameters. On the basis of his observations, Goldman⁵ advocates that the nasion should be positioned no less than 15 mm and no more than 20 mm from the medial canthus. By use of the corneal plane landmark, nasion height has been observed to range between 9 and 14 mm anterior to the corneal plane, according to direct measurements from patient profiles.³ Finally, Guyuron⁴ prefers that nasion height be set at 4 to 6 mm behind the glabellar line, given his personal observations of 1,619 life-size profile photographs. In contrast, the nasion level has been more uniformly reported as spanning between the suprataral fold and eyelashes of the upper eyelid.⁶ Specifically, Guyuron⁴ prefers the nasion level to be placed at the lower border of the upper lid margin on straight gaze. Yet, these specifications allow the nasion level to vary over a 12-mm range.⁷ Furthermore, Sheen⁸ notes that a lower level of the nasion, such as at the pupil, may be acceptable, because it provides softening of the profile, which may be desired in certain cases.

In summary, could the "clinical definition" of the "ideal" nasal radix, as well as other facial parameters, be more ac-

curately designated by contemporary patient population survey preferences rather than subjective interpretations and/or observations made by surgeons? This concern was made evident by a survey demonstrating a discrepancy in preferences for the "ideal" breast contour as judged by female patients versus plastic surgeons.⁹ Finally, anatomical landmarks used to define facial profile parameters should allow for evaluation of not only direct in situ but also lateral photographic image measurements. Such landmarks would allow young plastic surgeons to complete more thorough evaluations before they commit to operative plans.

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REPLY

Sir:

Drs. Mowlavi and Wilhelmi's letter allows us to further clarify our intentions with the article "A Clinical Definition of an Ideal Nasal Radix" (*Plast. Reconstr. Surg.* 109: 1416, 2002). The purpose of the article was to define proportions of the nose *within itself*. To that end, the relationship of the ratio of 2:1:1:0.75 (nasal length, tip projection, height of rhinion, and height of radix) is considered aesthetically pleasing, whether the take-off point of the radix is at the lash line, as in Figure 3 in our article, or at the mid pupillary reflex, as in Figure 4 of our article. If one prefers the radix to be at the midpu-

pillary reflex (but still adhere to the ratio of 2:1:1:0.75), that is an artistic judgment that, therefore, lends itself less to craniofacial mathematical formulae. It would appear that some successful actresses as well as models have a radix take-off point at the midpupillary reflex (Fig. 4 in our article), for example, Jean Simmons and Elizabeth Taylor. Some observers consider this trait more feminine, whereas a higher bridge (i.e., at the lash line) is seen as being stronger and more masculine. The surgeon must always consider the possibilities, however, with the structure presented. For instance, a radix should not be reduced to the midpupillary reflex in the face of thick skin and a bulbous tip.

These measurements can be made more complex, if one wishes, and for some, the measurements mentioned by Drs. Mowlavi and Wilhelmi and by Dr. Daniel in his Discussion may be helpful. For other surgeons, the ratio of 2:1:1:0.75 will be a more useful reference point of nasal proportions *within itself*, regardless of radix take-off point.

We are pleased that the article has stimulated so much interest in this important aspect of rhinoplasty.

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THE PROPANOLOL-EPINEPHRINE INTERACTION REVISITED: A SERIOUS AND POTENTIALLY CATASTROPHIC ADVERSE DRUG INTERACTION IN FACIAL PLASTIC SURGERY

Sir:

During our tenure as aesthetic surgery fellows this past year, we have witnessed a clinical problem that we would like to bring to the attention of our colleagues. Though well described in the referenced article published in 1983,¹ it missed our attention and perhaps that of some of our peers. The widespread clinical use of epinephrine as a vasoconstricting agent in plastic surgery procedures exposes many patients to a potentially disastrous drug interaction. As propranolol and other cardiac beta-receptor blocking agents are also widely in clinical use, the odds of encountering this situation are not trivial.

The adrenergic or sympathetic nervous system is modulated through alpha-receptors and beta-receptors. Depending on the type and location of these receptors, they may have a stimulatory or inhibitory nature. In the myocardium, beta-receptor stimulation causes excitation that results in a positive inotropic and chronotropic effect. The sinoatrial node conduction velocity is increased, and the myocardial refractory period is decreased. The net result of beta-receptor stimulation on the myocardium is an increase in cardiac index, cardiac work, and oxygen consumption. This is the physiologic basis for many of the therapeutic uses of beta-receptor antagonists.

The vascular system, with the exception of small coronary vessels, has both alpha-receptors and beta-receptors. Beta-receptor and alpha-receptor stimulation causes vasodilation and vasoconstriction, respectively. The net systemic effect of small doses of epinephrine, as would be administered subcutaneously during plastic surgery procedures, is decreased peripheral vascular resistance and diastolic pressure. Beta-blockade alters this net effect of epinephrine on the vascular system, resulting in vasoconstriction and increased peripheral vascular resistance.