

Soft Tissue Augmentation: Nonsurgical Approaches to Treatment of the Mid and Lower Facial Regions

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Fillers are playing an increasing role in dermatology practice, complementing the use of laser and other procedures used in skin rejuvenation. Prior to the injection of any filler, the patient should be counseled about what to expect in terms of any discomfort that may occur during or after injection, possible side effects, the results that he or she can expect, and the likely durability of correction. Knowing how and when to use dermal fillers throughout the face can help clinicians confidently educate patients regarding the full range of rejuvenation procedures that are available.

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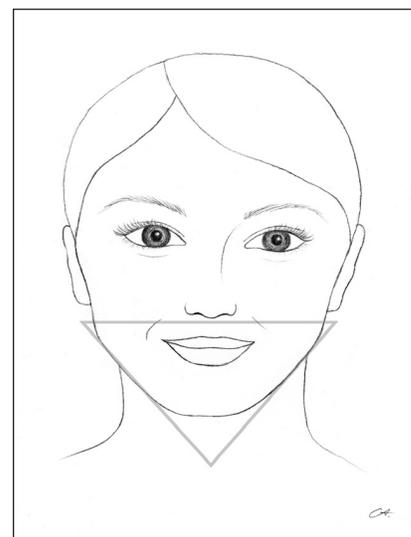
Overall, the global filler market has increased 200% since 2000, and is expected to grow about 25% annually, with soft tissue fillers eventually surpassing botulinum toxin A (botulinum; Botox®) in popularity (Medical Insight, Inc., n.d.). Fillers are playing an increasing role in dermatology practice, complementing the use of laser and other procedures used in skin rejuvenation. Indeed, a running witticism among practitioners is that there are two types of dermatologists: those who are using soft tissue fillers, and those who are going to.

The recent availability of longer-lasting filler products is increasing the appeal of injectable fillers to prospective patients. Factors that should be considered when selecting a filler for a particular site include the durability of the filler, the level at which it is to be injected, and whether it is being used to add bulk or for layering. Familiarity and experience are also important considerations for obtaining optimal results.

The Aging Face

The facial aging process reflects an interplay of genetic, anatomic, chronologic, and environmental factors, and is characterized by thinning of the epidermis and subcutaneous fat layers and a degree of bone resorption. In addition, progressive loss of organization of elastic fibers and collagen and weakening of underlying muscles also contribute to the wrinkling process. Age-associated changes can create shadows and hollows where they did not exist before. Extrinsic factors such as gravity, smoking, and sun exposure also con-

Figure 1A.
Triangle of beauty



tribute to changes in the face (Friedman, 2005).

For the purposes of visualizing age-associated changes and planning treatment, the face may be divided horizontally into thirds. The changes described previously, particularly the loss of volume in the upper two-thirds of the face and the descent of fat, lead to a more rectangular shape rather than the “triangle of beauty” that is accepted as ideal, particularly for the female face (Funt, 2006) (see Figure 1A).

Upper third of the face. In the upper one-third of the face, age-associated changes include horizontal forehead wrinkles, brow ptosis, vertical glabellar lines, fat loss, hollowing, and skin laxity in the temporal and infraorbital area.

Middle third of the face. In the mid-