Letter to the Editor

Technique Issues in Nonsurgical Filling of the Periorbital Hollows

To the Editor:
I read with interest the recent article by Dr. Robert Goldberg on the use of fillers in the periorbital hollows (Aesthetic Surg J 2006;26:69-71). While I thought the article was generally excellent, I have some differences with Dr. Goldberg with respect to injection technique.

Dr. Goldberg states that on average, he performs 25 to 50 passes of the needle to fill the hollows of each periorbital area; in my opinion, this can cause unnecessary bruising. He also describes injecting the hyaluronic acid gel deep to the obicularis, just superficial to the bone. I personally do not subscribe to such deep injection. Instead, I find that I get a much more pleasing cosmetic result by injecting superficially than if I employ deep injection.

When injecting hyaluronic acid gel, I use the Klein Anterior Flow (KAF) technique (Figure 1), in which the finger and thumb of the opposing hand are used to apply retraction. I inject superficially, using a 32-gauge needle, injecting anteriorly, very slowly, while taking care not to reinject the same site and employing very slow retraction. This technique provides for smooth superficial gel placement without the bruising, blue tint, or the lumps that Dr. Goldberg describes.

I believe that such adverse affects may be the result of subdermal vascular pressure caused by the quantity of product used. The 32-gauge needle causes little product shearing, and I get excellent longevity. The fanning and threading techniques used by Dr. Goldberg will cause significantly more soft tissue injury, which may also account for the bruising that he noted. I also apply ice both before and after the implant, which reduces the likelihood of resultant trauma.

Dr. Goldberg reports using as much as 1 cc per side to fill the periorbital area. This is a significant amount of gel and may result in the lumps and wheals he mentions; I typically use approximately 0.3 cc of product. Additionally, I rarely find it necessary to use hyaluronidase, as I do not get the lumps and wheals described. Furthermore, we do not fully understand hyaluronidase metabolism, and we do not know whether this enzyme can cause harm when used regularly.

Finally, the author comments that using hyaluronic acid gel will not improve dark circles under the eyes and can, in fact, worsen this condition. In my clinical experience, I find quite the opposite to be true. Quite often, these dark circles under the eyes are due to shadowing; by eliminating the shadowing effect, the dark circles will resolve (Figure 2). This concept is best understood by having a fundamental knowledge of light dynamics. Dr. Goldberg describes a diffused edema in the lower lids after gel implantation, which he states may last weeks after injection, and which he manages with hyaluronidase injections. I personally believe that the phenomenon he is describing may actually be due to injectors using too much pressure when injecting the product.

In my many years of performing soft tissue augmentation using the techniques I have described above, I have found that by injecting superficially and not deeply, and by not being overly generous with the product, I get a far superior aesthetic outcome and better patient satisfaction. It is important to remember that more is not necessarily better.

Arnold William Klein, MD
Beverly Hills, CA

Dr. Klein is a consultant-investigator for Allergan (Irvine, CA) and Medicis (Scottsdale, AZ): an investigator for Anika (Woburn, MA) and Genzyme (Cambridge, MA); a consultant for Ortho-Neutrogena (Los Angeles, CA) and Pfizer (Morris Plains, NJ) and an investigator, consultant, and shareholder in Skin Medica (Carlsbad, CA).

Copyright © 2007 by The American Society for Aesthetic Plastic Surgery, Inc.
1090-820X/$32.00
doi:10.1016/j.asj.2006.10.013
Technique Issues in Nonsurgical Filling of the Periorbital Hollows

Figure 1. A, An injection technique that includes a slow, gentle, superficial serial puncture, while using opposing fingers to retract and pull the skin tightly against the needle, will result in little to no bruising and a smooth anterior flow of filler. B, Superficial suborbital injection to even out the upper cheek with the orbit.

Figure 2. A, Pretreatment view of a 40-year-old man. B, Posttreatment view immediately after hyaluronic acid gel injection.