CANNULAS AND THE NEW HORIZON IN INJECTABLE AESTHETIC TREATMENTS

BY STEVEN DAYAN, MD

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t is the conscientious aesthetic physician who acts as a humanist—peering deep into each patient's essence beyond the superficial—that is best able to meet each patient's needs. Despite the winds of conventional wisdom cataloguing aesthetic physicians as purveyors of beauty for the vanity-challenged, our purpose couldn't be farther. It is with receptive minds, attentively listening to why our patients seek their stated goals followed by a keen and logical decision making process on how to get them there, that we are entrusted to perform. And while injecting a product may seem technically easy to many, effectively meeting our patients' desires is not. Such a task is not instinctively performed nor is it a skill set that can be flippantly acquired. It is a focused understanding based on a deep foundation of knowledge, and it is precisely why we have spent so many years in training. It is also why we are the best-suited ambassadors to guardian those who seek elevated self-esteem through aesthetic interventions. Physicians or providers without the aforementioned skill set may understand the technical components but they also retain a naiveté that likely hinders them from achieving the best or most appropriate outcome for the individual.

But the seasoned humanist aesthetic physician prepared with the knowledge and know-how must also possess an artistic eye and hand to constitute his/her plan. It is then that the physician considers the artistry inherent to our profession. In order to help our patients achieve their desired aesthetic appearance, it is best to embrace a wide range of devices and tools. Just as there are different kinds of brushes in a painter's arsenal, each with unique qualities that procures a different effect, aesthetic clinicians now have a multitude of options to approaching cosmetic procedures. In the arena of injectable treatments, the needle

has long served as the primary tool for injecting agents such as toxins and fillers. In recent years, however, as the injectable market has grown by leaps and bounds, one vehicle for delivering these agents has also opened new possibilities for delivering subtle results: the cannula.

THE BENEFITS OF THE CANNULA

Among the most important of the benefits of cannulas is safety. The risk of vascular necrosis, for example, is considered lower. It is difficult to cannulate a vessel with a 22- to 25-gauge blunt tip cannula. Additionally, as the cannula is gently maneuvered through soft tissues and around blood vessels there is arguably less pain and less bruising. Patients greatly appreciate having a procedure that causes minimal bruising and allows them to walk out the door immediately and return to everyday life. Thus, cannulas create the possibility of "one-day" procedures, which revolutionizes what we can offer as aesthetic clinicians.

And yet, use of cannulas has not taken off across the spectrum of aesthetic specialties. One reason may be the requisite learning curve with using a cannula. Another, perhaps, is the lack of formalized training from the manufacturers. None of the FDA-approved fillers are packaged with the cannula, as there has yet to be submitted a study proving its safety and efficacy. Therefore, pharmaceutical companies are restricted from teaching us with this tool.

In addition, cannulas tend to be more expensive than needles, which may contribute to why some who are comfortable with needles prefer not to explore the potential of cannulas. The method of injection is different with cannulas, specifically in how they penetrate the skin along with the tactile responsiveness the injector feels as deeper planes

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Cannulas differ from needles in how they penetrate the skin along with the tactile responsiveness the injector feels as deeper planes are approached and reached. Since the method of injection is different with cannulas, spend some time with someone who uses cannulas and watch educational videos on how to use them.

BOTTOM LINE

In order to help our patients achieve their desired aesthetic appearance, it is best to embrace a wide range of devices and tools. One such tool is the cannula, which is associated with less pain and bruising, while also allowing for deeper, broader, and subtler injectable treatments.

are approached and reached. Those who perform frequent fat transfer treatments are likely to have an easier time transitioning to the use of cannulas as the method is quite similar.

However, despite their benefits, it is important to recognize that cannulas are not a replacement of needles. There are still certain areas of the face where, in my hands, needles work just as well or better, such as filling in etched lines of the face, defining a vermillion border, or raising a corner of the mouth. However, when using needles it is probably best to inject slowly and with a smaller gauge needle, two technical points that may reduce morbidity. In my practice I find myself most often choosing a cannula first and following up with a needle. I have had success in using cannulas around the eyes, cheeks, nasolabial folds, and temples. Cannulas can also be used successfully in the lips.¹

As we start to do more facial shaping and beautification and veer away from a myopic ideology that centers solely on rejuvenating lines and folds, cannulas will likely become more relevant. It is likely that deeper broader strokes with cannulas will be complemented by needles that help with precise bordering, tightening up the edges, and filling in shallow corners.

CONCLUSION

Although cannulas are typically more expensive than needles and are associated with a learning curve for newcomers, they offer clinicians and patients many advantages, particularly as our armamentarium grows and we can fulfill a range of subtle effects. I encourage those who have not previously considered the use of cannulas to spend some time with someone who uses them and watch educational videos on how to use them.

Cannulas play an important role in the continued evolution of what we do as aesthetic physicians. They represent a new tool—or another type of brush, if we are to continue with the artist analogy. And with more tools to achieve increasingly subtle results, we have greater freedom and artistic individuality to attain these results. Thus, cannulas deserve to be recognized and explored in aesthetic medicine, not only for the benefits of safety and less bruising, but for enhancing our ability to deliver the next generation of results that our patients have come to expect.

1. Dayan SH, Ellis DA, Moran ML. Facial fillers: discussion and debate. Facial Plast Surg Clin North Am. 2012 Aug;20(3):245-64.