

that can be painful to the patient. The addition of local lidocaine into the area of anticipated injectable placement can distort the area, making the judgment of how much filler to place difficult. The injection of the lidocaine can cause a bruise and can take some time to set up. Vibration devices, cool air-blowing machines, and contact cooling devices can be costly and may require the aid of an assistant for easy application.

I describe a novel, patent-pending adjunct to dermal filler or neurotoxin injections that addresses all of these shortcomings stated above. The Ouchless Needle (Fig. 1) is a syringe-attached vapocoolant dispenser that is activated with one hand just before dermal filler or neurotoxin injections. It sprays a mixture of 1,1,1,3,3-pentafluoropropane and 1,1,1,2-tetrafluoroethane, both of which are nonflammable, chlorofluorocarbon-free vapocoolants. The Ouchless Needle vapocoolant spray mixture numbs instantly, obviating the 45-minute waiting period for topical creams, and has a few-second duration of effect. Because neurotoxin and filler injections are sequential and in multiple noncontiguous locations, the addition of lidocaine to the dermal filler may not produce enough of a numbing effect to help with the subsequent injection. I still add lidocaine to the fillers, as I believe this adds to the decrease in postinjection pain and throbbing.

The efficacy in pain reduction of vapocoolants as compared with topical creams for decreasing pain of intravenous cannulation^{1,2} in children and immunization pain³ has been described in the literature. Weiss and Lavin⁴ have recently published a split-face study of botulinum toxin type A patients in which half the face was sprayed with a vapocoolant and no treatment was applied to the other half. Overall, 67 percent of patients reported that the vapocoolant side

had less pain and 54 percent preferred vapocoolant for their next treatment.

The addition of a syringe-attached vapocoolant dispenser such as the Ouchless Needle can make for a more comfortable injection experience for our patients, which may allow us to reach out to those patients who would otherwise not consider an injectable cosmetic enhancement secondary to fear to the needle pain. It will also alleviate the patient's time commitment, allowing for a shorter appointment time.

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DISCLOSURE

The author is the chief executive officer and founder of the BellaNovus Development Company (Louisville, Ky.), which makes and distributes the Ouchless Needle device.

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Fig. 1. The Ouchless Needle on a Juvéderm (Allergan, Inc., Irvine, Calif.) syringe.

Pediatric Nasal Reconstruction for Nasal Tip Hemangioma

Sir:

We read with great interest Dr. Burget's recent article on pediatric nasal reconstruction. Dr. Burget is well known for his special interest and phenomenal results in nasal reconstruction. We would like to congratulate him for the unique and very detailed case presentation and the excellent result achieved.

We have had a similar case of nasal tip hemangioma extending to the upper lip on a female pediatric patient (Fig. 1). Our approach was completely different from Dr. Burget's. We chose to follow a "wait-and-see" approach initially, until involution of the hemangioma was evident. Our experience with this patient contrasts with Dr. Burget's observations, that "when a hemangioma necroses, collagen contraction shrinks the nasal lining skin and displaces the alar cartilages posteriorly and superiorly."

The patient was followed up until the age of 9 years (Fig. 2), when a very conservative excision of the excess



Fig. 1. The patient at age 6 months.

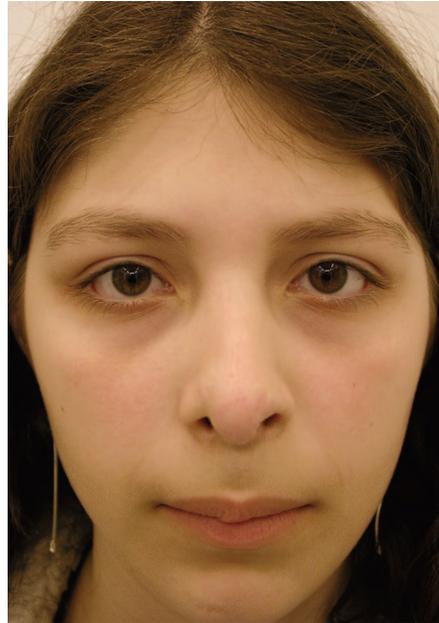


Fig. 3. The patient at age 16 years.



Fig. 2. The patient at age 9 years.



Fig. 4. The patient at age 24 years.

skin on the nasal tip and dorsum was performed, following the shrinkage of the hemangiomatic tissue (this was probably the reason why tissue shrinkage was minimal).

At the age of 16 years (Fig. 3), a second operation was performed, where the nose was reconstructed using an open rhinoplasty method. We used a columella strut graft, spreader grafts, and lower lateral grafts with the septum as a donor site.

At the age of 24 years (Fig. 4), a third operation was performed for the second stage of the nasal reconstruction. The hump was reduced and lateral crural strut grafts were used. We believe our approach has achieved acceptable results, and we would like to add our experience to the excellent and fascinating case presented by Dr. Burget.

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Reply**Sir:**

Congratulations to Dr. Mandrekas and associates on the successful example of nasal reconstruction in a child. The beautiful result is testimony to having made all the right decisions. I am especially pleased that techniques of open rhinoplasty were used, as I have also used these in my practice. These techniques are useful when the anterior nasal septum is present. In patients where the anterior septum is missing, other more complex techniques for support of the reconstructed nose are required.

The congenital hemangioma seen in Dr. Mandrekas' patient had undergone involution, *not* necrosis, so that the entire integument of the nose was still present. The patient possessed a slightly bulky nose, but not a horribly deformed one. Therefore, her operations were rightly postponed until ages 9 and 16 years. In many such cases, the congenital hemangioma has undergone frank necrosis and fallen away as a result of autolytic débridement. Alternatively, a surgeon has, with good intention, excised the tumor mechanically and with it a part of the underlying normal, natural nose. The resulting nasal deformity can be quite severe, which may in turn have negative and lasting psychological and social repercussions. In these instances, it is a mistake to allow a child to grow up without correction of the nasal deformity. Reconstruction performed after a child has grown is done too late to avoid the social isolation and stigma of a facial deformity when school attendance begins. It is my firm belief that a severe nasal deformity should be corrected through staged procedures beginning at age 3.5 years. The child can then enter school at age 5 years appearing normal and possessing the confidence that such an appearance bestows. Skin grafts, composite grafts, and free microvascular flaps may temper or mute a severe deformity. However, only a vertical forehead flap with a cartilage graft framework eradicates it. Had I seen the 9-year-old patient presented in my article at age 3.5 years, I would have performed a forehead flap reconstruction at that time.

Each patient is an individual who presents with unique challenges. In children especially, one must consider the negative social impact a marked deformity may have on the child and their parents and siblings. Patients often suffer from an overwhelming sense of shame, and the formation of a well-adjusted personality and appropriate social skills may be inhibited. In an early article on the subject, Dr. Caspar M. Epstein expresses the core of the problem:

*"There are three important psychological effects of deformity: (1) inferiority and shame, (2) modification of self-expression, and (3) antisocial tendencies. Children are notoriously observant of the unusual, and are cruel; they have no inhibitions. A great deal of undue attention is invariably directed to any cosmetic abnormality. There is no attempt on the part of a child to . . . refrain from ridiculing."*¹

Dr. Epstein goes on to state that children with facial deformities are often shunned or forced into an inferior social status.¹ Thus, in the pediatric patient population, appropriately applied and well-timed aesthetic reconstructive surgical intervention is of paramount importance. It is our professional duty to familiarize ourselves with and use all of the tools at our disposal to, as Gaspare Tagliacozzi noted in 1597, "bring back, re-fashion, and restore to wholeness the features that nature gave but chance destroyed."

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Reducing Scar Formation after Lip Repair by Injecting Botulinum Toxin**Sir:**

We read with great interest the recent article "Intralesional Botulinum Toxin Type A Injection as a New Treatment Measure for Keloids."¹ We would like to take the opportunity to further expand on the topic, with injection of botulinum toxin to reduce scar formation after lip repair for cleft lip.

One of 500 to 1000 babies is born with a cleft.² Cleft lip, with or without cleft palate, is the most common of these facial clefts. Reconstruction of the upper lip and restoration of the continuity of the circular muscle in the lip are important steps in treatment. However, surgical intervention leads inevitably to scar formation. Scars are usually termed hypertrophic when they develop excessive redness, elevation, widening, and stiffness.³ The presence of serious scarring limits social interaction and affects self-esteem after lip repair.⁴ Surgeons have been focusing on how to make this scar less conspicuous and how to obtain a straighter and more natural-appearing suture line.^{5,6} Carefully designed incision lines, anatomically appropriate muscle reconstruction, and atraumatic suturing are essential for optimal scars.⁷ However, because of continuous muscle contraction and skin tension caused by infant crying and feeding, we have difficulty in achieving a satisfactory effect after lip repair. Surgeons have had to use a lip bumper to protect the wound and reduce continuous muscle contraction and skin tension. How can we further reduce scar formation after lip repair?

Botulinum toxin is the universally accepted standard treatment for upper facial rejuvenation. Botulinum toxin use in the mid and lower face and neck has become an increasingly popular indication for facial aesthetic treatment.⁸ Botulinum toxin acts by inhibiting