Static glabellar lines can be treated using a superlocalized phenol-croton peel



Gustavo C. Nogueira, MD,^a Raquel I. F. M. Oliveira, MD,^a Marina V. R. de Queiroz, MD,^a Ana C. T. R. de Medeiros, MD,^a Livia P. S. Oliveira, MD,^a and Gisele V. de Oliveira, MD^b

Key words: chemical peel, croton oil; Hetter formula; glabellar frown lines; phenol, penol-croton oil peel.

CHALLENGE

Glabellar frown lines treatment combines injectable fillers, polydioxanone threads, and botulinum toxin, but, to our knowledge, a single technique capable of treating deep wrinkles and photodamage remains elusive.

SOLUTION

We have been treating glabellar frown lines using superlocalized phenol—croton oil chemical peel. Initially, the skin is degreased by rubbing it with cotton soaked in acetone, to standardize the peeling.¹ The area of interest is marked using a white skin pencil. A 0.8% Hetter² formula is applied thoroughly with a first pass using a wooden applicator with the wet tip wrapped in cotton, followed by 5 to 10 multidirectional passes without adding any extra solution. Stretching the skin during the application helps to reach the whole wrinkle. In case of any deeper lines, we punctually reapply on the spot overlapping the application with extra volume. No analgesia is needed, as phenol itself works as an anesthetic drug. The patient feels a burning sensation that lasts for approximately 10 seconds after the first pass; mild burning may return and persist for 6 to 8 hours. A total of 1% silver sulfadiazine cream and petroleum jelly are applied throughout the healing period. We consider that this technique achieves good results, with a low risk of demarcation with nearby skin areas (Fig 1, *A*); however, demarcation can be seen in phototypes higher than III or when skin exhibits increased elastosis. Long-lasting results are expected for over 2 years (Fig 1, *B*). The "superlocalized-phenol-croton peel" is performed as an in-office procedure, does not require expensive technology, and may lead to prolonged improvement of static glabellar lines, which make patients look stern. Larger studies are needed to evaluate the safety and complication rates for this simple technique.

Conflicts of interest

None disclosed.

Funding sources: None.

IRB approval status: Not applicable.

From the Dermatology Clinic, Itaúna, Minas Gerais, Brazil^a; and the Luxemburgo/Instituto Mario Penna Hospital, Belo Horizonte, Minas Gerais, Brazil.^b

Correspondence to: Gustavo C. Nogueira, MD, Dermatology Clinic, 11 Diogenes Nogueira St, Itaúna, MG, IL 35680-040, Brazil E-mail: gustavoderma@yahoo.com.br.

JAAD Int 2023;11:63-4. 2666-3287

^{© 2023} Published by Elsevier Inc. on behalf of the American Academy of Dermatology, Inc. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/ licenses/by-nc-nd/4.0/).

https://doi.org/10.1016/j.jdin.2022.11.007



Fig 1. A, Patient with prominent deep glabellar frown line wrinkles before treatment. **B**, Two years after the procedure, the glabellar area still exhibits excellent results, even without further procedures on the treated area.

REFERENCES

- 1. Wambier CG, Lee KC, Soon SL, et al. Advanced chemical peels: phenol-croton oil peel. J Am Acad Dermatol. 2019;81(2):327-336.
- 2. Hetter GP. An examination of the phenol-croton oil peel: part IV. Face peel results with different concentrations of phenol and croton oil. *Plast Reconstr Surg.* 2000;105(3):1061-1083.