Reply to "Interdigital injection of botulinum toxin for patients with Raynaud phenomenon"

To the Editor: We thank Dr Jaloux and colleagues for their interest in our study.[1] We appreciate the dialogue that has been generated from our report because it reflects the lack of standardized injection techniques for botulinum toxin (BTX) and protocols in patients with Raynaud phenomenon.

Complications of BTX are rare, but intrinsic muscle weakness is one of the most common adverse effects. It is temporary and usually lasts from 2 to 4 months.

In the literature, there are few variants of BTX injection techniques in patients with Raynaud phenomenon, such as proximal and distal palmar, digital, and interdigital approaches. In our clinical practice, we have used both the distal palmar and interdigital techniques.[2] The interdigital technique that we have reported[1] is a variant of the distal palmar one. The neurovascular bundles targeted using both distal palmar and interdigital techniques are the same.

We have observed, however, that interdigital injections are not only less painful, but we also have not had any cases of intrinsic muscle weakness. This variant can sometimes generate a mild loss of strength in the pincer grasp. In an attempt to prevent this complication, we modified the original interdigital injection and have observed that avoiding BTX injections in the thumb web space can help minimize the loss of strength in the pincer grasp (Fig 1). We usually inject 34 IU of BTX per hand and none of our patients have experienced muscle weakness after the procedure.[3]

Nonetheless, these results are based on our personal experience. Further randomized placebo-controlled studies are needed to confirm these results and to standardize the injection technique and therapeutic indications.

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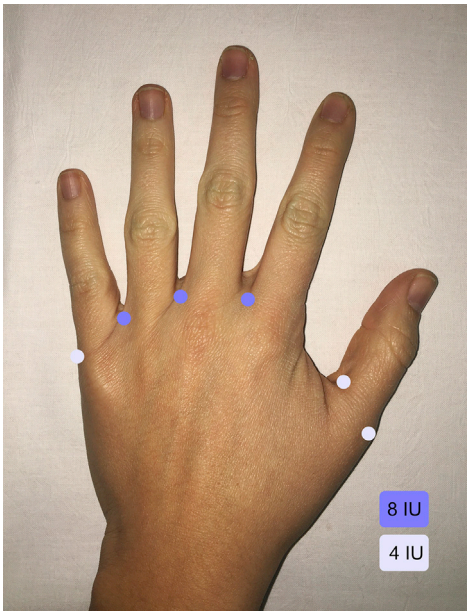

Fig 1. Location and amounts of injections with the modified interdigital botulinum toxin injection technique.

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REFERENCES

1. Quintana-Castanedo L, Feito-Rodríguez M, De Lucas-Laguna R. Interdigital injection of botulinum toxin for patients with Raynaud phenomenon. *J Am Acad Dermatol*. 2020;83(6):e399.
2. Neumeister MW. Botulinum toxin type A in the treatment of Raynaud's phenomenon. *J Hand Surg Am*. 2010;35(12):2085-2092.
3. Quintana-Castanedo L, Feito-Rodríguez M, Nieto-Rodríguez D, Chiloeches-Fernández C, Maseda-Pedrero R, de Lucas-Laguna R. Botulinum toxin A treatment of primary and secondary Raynaud's phenomenon in children. *Dermatol Surg*. 2019.

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