Letter to the Editor

In Reference to Management and Follow-up Results of Salivary Fistulas Treated With Botulinum Toxin

Dear Editor:

We read with great interest the article by Send et al. entitled “Management and Follow-up Results of Salivary Fistulas Treated With Botulinum Toxin.”1 We congratulate the authors for the exhaustive and careful analysis of their case study in which they showed the efficacy and safety of botulinum toxin A neurotoxin (BoNT) treatment for parotid fistulas and sialoceles.

Intraparotid injection of BoNT is generally considered a safe and effective treatment when used for functional silencing of the salivary glands in disorders such as sialoceles, salivary fistulae, chronic sialadenitis, and Frey syndrome.2 Considering our clinical experience, we recommend BoNT treatment after approximately 5 to 7 days of unsuccessful conservative measures and avoidance of the epithelial coating of the fistulous tract3; and in recalcitrant or large fistulas we strongly agree with the authors about the use of ultrasound for BoNT injection, which can guarantee safe application into residual gland tissue even under unfavorable anatomical conditions.4

In this regard, we would like to describe a case of a 47-year-old Caucasian woman who developed a velopharyngeal insufficiency after a BoNT ultrasound-guided injection for a postparotidectomy salivary fistula. The patient underwent a left superficial parotidectomy for a pleomorphic adenoma, but on postoperative day (POD) 6 the patient developed a sialocele. For this reason, on POD11 a total of 40 I U of BoNT (Dysport, Ipsen Limited, England) was blindly injected in the residual substance of the gland and inside the sialocele cavity. Nevertheless, on POD20 a parotid fistula appeared, and a total of 80 I U of Dysport was administered in the deep parotid lobe under ultrasound control. The complete healing of the fistula was obtained, but unfortunately the patient developed a left velopharyngeal insufficiency after few days, which spontaneously solved 3 months later (Fig. 1).

Complications after intraglandular BoNT injection have been reported for the treatment of drooling in neurologic patients, including dysphagia, aspiration pneumonia, and loss of motor control of the head.5,6 However, these complications are frequently a consequence of a high total dose of BoNT used because the treatment of drooling often requires 2- or 4-gland simultaneous injections.

In our case, we hypothesized a diffusion of BoNT from the deep lobe of the parotid to the tensor veli palatini muscle through the parapharyngeal space (Fig.2). Therefore, because it is well known that BoNT may spread through the fascial planes to the adjacent muscles, for large fistulas that may require an ultrasound-guided parotid BoNT injection we suggest the use of a lower dose and volume of BoNT to avoid unforeseen complications.

Fig. 1. Left velopharyngeal insufficiency. *Uvula.

Fig. 2. Schematic axial view of the tensor veli palatini muscle and its rapport with the parotid gland and the parapharyngeal space.
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