

Psoriatic Lesions Following Botulinum Toxin: A Injections to the Glabellar Region

Dear Editor,

Botulinum toxin-A (Btx-A) has widespread usage for improvement of facial appearance especially in the periorbital region. There are a variety of reported adverse effects such as temporary headache, injection site pain, bruising, edema, nausea and nasopharyngitis. Also there are complications related to overspreading of the toxin.^[1] Some of these situations could be avoided with a careful preoperative evaluation of the patient. Preoperative conditions may affect the overall outcome, and should be addressed individually. Psoriasis is a common skin disorder, mostly manifesting in the extensor parts of the extremities. Facial involvement is relatively rare and is shown to be an evidence of severe psoriasis.^[2] Patients with facial involvement and severe psoriasis tend to have positive Koebner response, which could be defined as acute response of the disease to trauma on the skin.^[3] Epidermal puncture and especially secondary dermal events were shown to be initiative events leading to the Koebner response.^[4]

A 54-year-old woman complaining about the wrinkles in her glabellar and periorbital regions visited our outpatient clinic. She was not on any other medication and declared no other conditions in the preoperative evaluation. She was treated with Btx-A (Botox- Allergan Inc., Irvine, CA, USA) injections for glabellar, frontal, and crow's feet regions. Micro-fine plus 30-G needles (BD- Beckon Dickonson Comp, Franklin Lakes, NJ, USA) were used for injection. The total used units of Btx-A for glabella, frontal region and crow's feet region were 24 MU, 16 MU and 18 MU, respectively. On her postoperative 14th day visit, there were signs of psoriatic lesions such as slightly elevated red papules with white scaling in the glabellar region injection sites [Figure 1]. She admitted that she had psoriasis for 30 years. She had no complaints since she was used to the



Figure 1: Psoriatic lesions in the glabellar region seen in postoperative 14th day visit

chronic condition of the disease. The patient was referred to the dermatology department for evaluation and the lesions were diagnosed as Koebner response of psoriasis. Although Koebner response after trauma in psoriasis is well documented there is little information about Koebner response related with Btx-A injections. In a study by Bowden *et al.*, psoriatic eruptions were reported after intramuscular Btx-A injection for ocular motility disorder.^[5] On the other hand Btx-A has been shown to improve inverse psoriatic lesions related to hyperhidrosis.^[6] In the present case, psoriatic lesions defined as Koebner response were diagnosed after Btx-A injections. Since the initiative mechanism is the cutaneous trauma with the needle not the Btx-A, Koebner response of the psoriasis could be expected after every injection. It is interesting that the patient had these lesions in the glabellar region but not in the other injection sites. This might be related to deeper penetration of the needle in these areas. Also predominance of the facial psoriasis in the forehead region could also be blamed.^[2] Any possible role of Btx-A itself in this response could be evaluated with further studies. Even though our patient was satisfied with the result, this kind of lesions in the facial region could be troublesome in a patient with higher expectations. This paper points out the need of careful preoperative evaluation for all procedures and presents a case of psoriatic lesions after Btx-A injection for our colleagues to keep this situation in mind prior to procedure.

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Conflicts of interest

There are no conflicts of interest.

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