

## Information on a possible association between botulinum toxin treatment and alopecia

Alopecia is the general medical term for 'hair loss, which can refer to a small bald patch of hair to total loss of hair. Although alopecia is not damaging to your physical health, hair loss can have effects on your emotional health and quality of life.

The manufacturers of Botox® acknowledge that alopecia is a common adverse effect (meaning it affects between 1 in 10 and 1 in 100 people) following treatment of primary hyperhidrosis of the axillae.[1] The manufacturers do not state the location of the alopecia following treatment of primary hyperhidrosis of the axillae but it would be fair to suggest that as alopecia is not reported as an adverse effect for any other indication it would be fair to suggest that the alopecia occurs in the area of treatment, i.e. the axillae. In addition they note that alopecia has been reported as an adverse effect since Botox® has been marketed, although the manufacturers do not state the indication for Botox® nor the area of body affected by alopecia.[1]

A search of the literature did not identify any specific reports of alopecia on the scalp associated with the administration of botulinum toxin for cervical dystonia or spasticity. There was one case report of unilateral madarosis (loss of the eyelashes) and facial alopecia, which was presumed to be secondary to botulinum toxin type A injections, used for the treatment of left oromandibular dystonia.[2] Review articles discussing drugs known to cause alopecia do not include botulinum toxin as a potential cause however.[3,4] Interestingly, there are a few published studies investigating the use of local botulinum toxin for the treatment of alopecia on the scalp; the efficacy and mechanism of action for this treatment are unclear. [5-7]

In conclusion, a literature search did not identify any reports indicating that the administration of botulinum toxin for cervical dystonia or spasticity is associated with alopecia on the scalp. The relevance of reports following botulinum toxin marketing, documenting alopecia as an adverse effect, remain unclear.

### References

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Acknowledgement to Bethan Rogers (Medicines Information and Formulary Support Pharmacist) for her assistance in collating the literature