



AESTHETIC AND COSMETIC DERMATOLOGY (LASERS SEPARATE CATEGORY)

# DOSING OF ONABOTULINUMTOXIN TYPE A FOR UPPER FACE EXPRESSION LINES IN MALES: A SYSTEMATIC REVIEW OF CURRENT RECOMMENDATIONS

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**Introduction:** Botulinum toxin type A (BoNTA) is the most commonly performed minimally invasive procedure in men. Even after a decade of its approval by the U.S. FDA, data on its use in cosmetic indications for male patients is scarce. Despite various recommendations by in the literature, distinct guidelines for its use in men and women do not exist.

**Objectives:** To delineate safe and effective doses for the use of Onabotulinumtoxin type A in males for correction of upper facial expression lines.

**Materials and methods:**

**Data sources:** PubMed, EMBASE, Cochrane database, and Google Scholar were searched from 2002 till 2017 inclusive.

**Review methodology –** Data were extracted, and the studies assessed via PRISMA and the AGREE II tool respectively. A narrative methodology was followed to interpret the data from 11 consensus recommendations on the use of Onabotulinumtoxin A in expression lines.

**Results:** General characteristics of the studies were delineated. Average dosing for the treatment of glabellar frown lines, crow's feet and horizontal forehead lines were noted. Changing trends and gender variation were noted. 6 of the 11 recommendations suggest the need to alter dosing in male patients, although do not give separate recommendations. Clear mention of variation in dosing in males and females, has been mentioned in 54% of the recommendations for glabellar frown lines, 18% for lateral canthal lines and in 63% of the recommendations for forehead lines.

**Conclusion:** The results suggest the urgent need for up to date recommendations for the use of Onabotulinumtoxin type A in upper face expression lines of male patients. The limitations of this study include the review being carried out by a single researcher, and the discussion being limited to Onabotulinumtoxin A. The author suggests modifications in dosing of Onabotulinumtoxin A for treatment of the male face.

