Botulinum Toxin Injections to the Lower Face

Michael A. C. Kane M.D.

Manhattan Eye, Ear & Throat Hospital  AES 2013

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Disclosure:
I HAVE TAKEN MONEY/Travel/Options FROM:

- Allergan
- Medicis/Valeant
- Mentor/J&J
- Merz Aesthetics
- Sanofi/Valeant
- Stiefel
- Shire
- Revance
- Teoxane
- Galderma
- Qmed
- Canfield
- Merz
- Lithera
- Kythera
- Coapt
- HLA Technologies
- Hancock Jaffe Labs
- ABG Labs
- Botulinum Injections for the Lower Face
- NLF
- Lips
- Labiamental
- Chin
- Dimples
- Neck
- Levator Alequea Nasii
- Orbicularis Oris
- DAO, DLI
- Mentalis
- Zygomaticus
- Platysma
- Nasolabial Fold
- Pessa ASAPS 1992 paper
- Pessa “Improving the Acute Nasolabial Angle and Medial NLF by Levator Alae Muscle Resection”
- Maximal NLF improvement
- Minimal smile change
- Nasolabial Fold 10 units BTX
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- Initial Patient Group - May 1992
- 25 Patients
- 7.5 Units each LAN muscle
- 16 Patients returned for repeat injection
- 64% Satisfaction
- Decreased lip elevation
- Smile Patterns
- Rubin 1974
- “Mona Lisa” Zygomaticus Major 64%
- “Canine” Levator Labii Superioris 35%
- “Full Denture” elevators and depressors 2%
- Nasolabial Fold “Mona Lisa”
- Nasolabial Fold Canine
- Canine Smile 15 units BTX
- Extreme “Canine” Gummy smile
- Full incisor show
- “Large portion gum”
- Surgery
  - 1978 Litton & Fournier – adhesion
  - 1984 Ellenbogen – Levator Labii Superioris transection and adhesion
- Gummy Smile – Unhappy 10u
- Normal Close-up
- In Repose
- Too Effective?
- Animation 5u right, 3.75 u left
- Repose
- Smiling 7.5 units sym
- Repose (Natural posture)
- Repose Mouth Closed
- Severe NLF, Assymmetry, Gummy
- Repose
- Dosage
- Start small!
- 2.5 units per side
- Asymmetry common – Gummy
- 8.75 units my personal maximum
- Groove nasal bone/maxilla
- Excessive Dimpling
- Zygomaticus
- Mimetic muscles
- Dermal insertions
- Low doses
- Into dimple
- Distal to dimple
- Before Injection
- Zygomaticus, DAO, DLI
- Natural Smile
- Orbicularis Injection Technique
- Desire diffuse weakening of sphincter
- Horizontal, threading injections on cutaneous side of vermillion border
- Four injections per lip
- Rarely inject philtrum
- Mentalis
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- Ability to sculpt (laterally)
- Threading injections
- Parallel to surface
- Aim for muscle/fascia junction
- Dose 2.5u - 12.5u (B)
- Beware droop with overzealous injection
- Commonly paired with DAO
- Mentalis - Animation
- Mentalis - Repose
- 61 y.o.
- DAO, DLI, Lateral Mentalis 20u (B)
- DAO, DLI, Lateral Mentalis 20u (B)
- DAO Injection Technique
- Observe normal animation
- Observe extreme animation “Show me your lower teeth”
- Usually 2 injection points/side
- Often asymmetric
- First Point: Dimple between comissure and mandible
- Second Point: Midway between point 1 and mandible IN THE DIRECTION OF THE MOTION
- DAO
- “I Don’t Like My Chin or Mouth”
- Mentalis 5u (B)
- Mentalis Injection Technique
- Superficial muscle only!
- Deep muscle full strength – oral competence
- Threading injections
- Aim – superficial to muscle / deep to fascia
- Range 2.5 to 12.5 units
Consider DAO injection

Mentalis Injection Technique

DAO 7.5u (B)

Lips pursed OO 4u total

Orbicularis Oris, DAO, Mentalis

DLI

Cephalad and medial to DAO

Small fibers

Low doses 1-2.5u total

Watch for outward rolling lip

Mentalis 3.75u

DAO, DLI 3.75u total

Repose

Smiling

Orbicularis Injection Technique

Desire diffuse weakening of sphincter

Horizontal, threading injections on cutaneous side of vermillion border

Four injections per lip

Rarely inject philtrum

Orbicularis Oris Injection 3.75u

Botox and 2.0 cc Zyplast to Lips

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Botox and HA 0.3cc (rhytids only)

Botox OO 3 u, DAO 2.5, HA 0.8cc Com/Rhytids

Mid 30’s – Good Candidate
- Mid 50’s Face/Neck Lift 30u
- Platysma Bands – Poor Candidate 35,15u
- 45 Units
- Complications 7000 May 1992
- 0 Dysphagia
- 0 Dry Mouth (Botox)
- 0 Hoarseness
- 0 Neck Weakness
- As of Oct 2013 Still Zeroes

**Conclusions**

- Dose range 15-30 units
- Skin laxity predicts outcome
- Excess fat protective of banding
- Beware high doses high complications
- High dose, accelerated aging?

**Best Candidates**

- Young patient 35 – 50 Minimal skin excess
- Any age post surgery Minimal skin excess
- Young patients s/p liposuction