ADVANCED BOTULINUM TOXIN

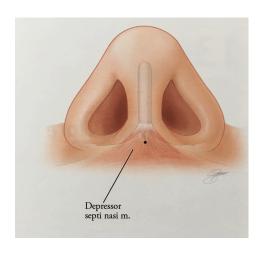
NASAL TIP LIFT

Toxin can be injected at the base of the columella to produce elevation of the tip of the nose.

Muscle injected Depressor Septi Nasi

This muscle extends for Orbicularis Oris and insert onto the medial crura Dose 2-5BU 5-10SU in midline.

Results are subtle and will not improve a severely ptotic nose.



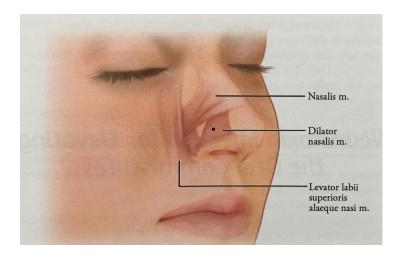
NASAL FLARE

To reduce the inadvertent flare when speaking.

Muscle injected Dilator Nasalis.

This is a superficial muscle that inserts into the lateral cartilage.

Dose 3-5BU 10-15SU each side

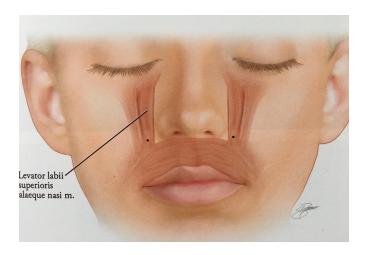


GUMMY SMILE

To reduce the gingival show when smiling.

The upper lip is elevated by Levator Labii superioris and Levator Labii Superioris Aleque Nasai (longest name for any muscle in the animal kingdom) These muscles arise from the frontal maxilla and insert into the upper lip. Dose 1-2BU 2.5-5SU.

Precautions. This injection lengthens the upper lip so be careful in the elderly. Also risk of asymmetry. This can be corrected at FU.



DIMPLED OR ROTATED CHIN

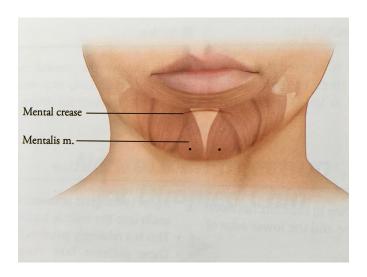
To reduce the orange peel effect of the chin when talking or at rest. Reduce the rotation of the chin due to atrophy of the underlying tissues. Muscle injected is Mentalis.

These paired muscles arise from the mandible and insert into the skin of the chin.

Contraction of these muscles causes the lower lip to pout and contribute to the mental crease.

Dose 2-5BU 5-10SU each side.

Place injections low on the chin to avoid lip droop.



PERI-ORAL / SMOKERS LINES

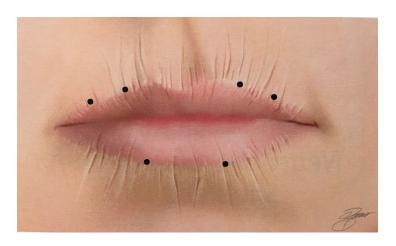
To soften the radial lines that extend from the lips dues to ageing/talking/smoking etc.

The muscle injected is Orbicularis Oris. This muscle is a sphincter that surround the mouth.

Dose 1-2 BU per quadrant/2.5-5SU per quadrant.

Inject 1-2mm above the vermillion border.

Inject symmetrically. Caution patients about drinking, speaking (p and b) and those who sing or play a musical instrument.

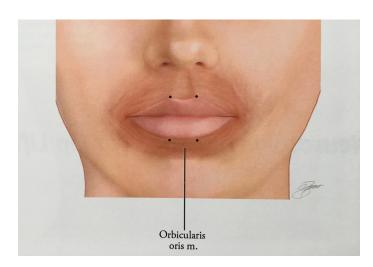


TOXIN LIP LIFT

To increase the amount of pink lip on show.

Muscle injected-Orbicularis Oris. This muscle pulls most strongly towards the centre of the lips. Weakening this area of the muscle allows the lip elevators and depressors to increase their pull on the lips causing mild evertion. Cautions as with peri-oral lines.

Dose 1-2BU 2.5-5SU per injection point. Inject directly on the vermillion. This will not add volume but can help with filler augmentation in patients with very thin lips or those whose lips invert significantly when smiling.



ELEVATING THE ORAL COMMISSURES/ DAO

To reduce the amount of downward pull on the corners of the mouth creating a less sad face.

Muscle injected Depressor Anguli Oris (DAO)

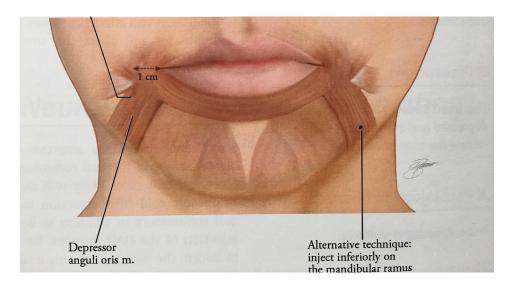
This can be combined with dermal filler in this area.

DAO arises from the mandible and inserts into the modiolus. When weakened this allows compensatory pull upwards of the lip/mouth elevators.

Dose 2-5BU 5-10SU each side.

Positioning of injections to be discussed. Make sure to stay at least 1cm lateral and 2cm below the corner of the mouth.

Main problems are poor result, asymmetry or inadvertent diffusion into the lip depressor causing incompetence.



PLATYSMAL BANDS/ TURKEY NECK

These bands are seen as vertical thickening of the platysma that increase with age and are accentuated with tightening the neck.

The platysma is a thin superficial muscle that arises from the clavicle and inserts into the SMAS of the face.

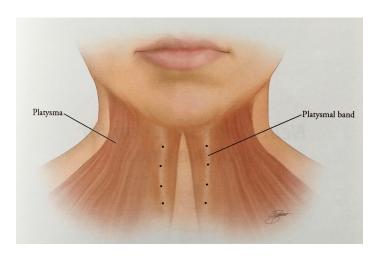
Identify the bands by asking the patient to contract the neck. Grasp the bands with 2 fingers and inject deeply into the band at intervals of 2cm.

Dose 2BU 5SU per injection point.

Total dose 10BU per band.

Cautions-poor result with elderly or heavy necks. Risk of dysphagia with higher dosing.

Results can be relatively short lived.



NECKLACE LINE

Horizontal lines around the neck caused by dermal attachments to the SMAS These worsen with age.

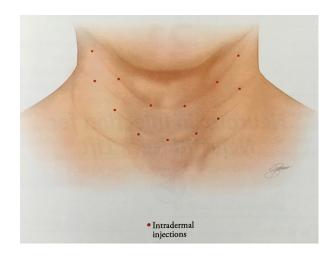
Superficial injections 1-2BU 2.5-5SU per injection point.

Space points 2cm apart

Total dose 15-20 BU

Caution-swallowing can be affected with high or deep dosing.

Results at best subtle.



NEFERTITI LIFT

To increase the definition of the jawline and neck in selected patients.

Selective weakness of platysma allows the facial elevators to lift sagging tissue and increase definition.

Key is patient selection.

Ask patient to contract platysma-if the mandibular border becomes less visible then the patient is likely to be a good candidate.

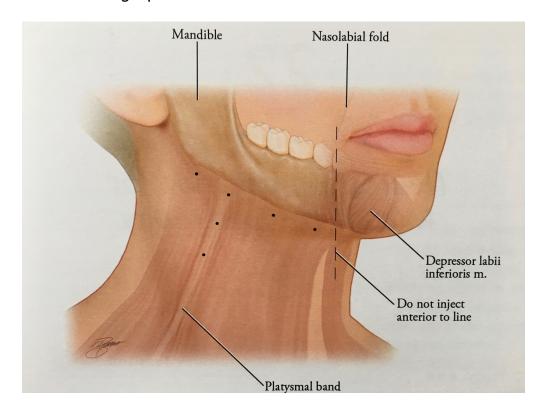
Inject along the inferior border of the mandible and the upper portion of the lateral

platysmal band.

Dosing 15-20 BU per side 40-60SU per side.

Inject lateral to a line drawn down from the naso-labial fold.

Another technique involves diffuse superficial weakness of platysma in an inverted triangle pattern both sides.



MASSETER HYPERTROPHY

To help improve teeth grinding, clenching or to reduce the width of the jaw to create a more triangular face.

Masseter arises from the inferior zygoma and inserts into mandible.

Identify the masseter on contraction.

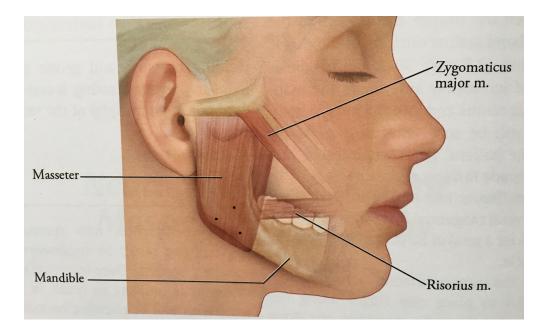
Inject deep and low down and posterior.

3 injection point-5BU per point 15SU each side

Caution-watch for diffusion into zygomaticus and medially into risorius.

Review in 6 weeks with a view to further treatment then.

Results can last 6-12 months.



TOXIN FOR UNDERARM SWEATING

Botulinum toxin prevents the release of acetylcholine. This neurotransmitter is also responsible for sweating from eccrine glands.

Results can be impressive and last for up to 12 months.

Starch iodine test is not required.

Inject hair bearing skin.

Dosing 50BU per axillar divided into 20 injections

125SU each side

Use topical anaesthesia.

Injection is superficial as the glands lie in the dermis.

I draw a simple grid on the skin so that I don't miss anywhere. Injection points are about 1.5-2cm apart.

TOXIN FOR MIGRAINE

Botulinum toxin A has been successfully used as a treatment for migraine and is now available on the NHS.

Some patients respond very well, some not at all whilst most will see a modest improvement in frequency or severity of attacks.

Most attacks start anteriorly so treating the glabella and frontalis is usual.

Remember the patient may have to compromise headache with brow ptosis.

Also trigger points should be injected.

These are typically over temporalis, occipital muscle and upper trapezius.

Trigger points are usually identified by excessive tenderness. Toxin injections are deep into the muscle (near the bone).

Dosing is 5-10BU per trigger point-massage after.

Caution-ensure the diagnosis is correct before treatment. There is a 25% initial placebo effect. Advice patient of potential cost, risk of no significant improvement and that they can see their GP with a view to referral.