

Botulinum Toxin in Practice – Platysma - Neck band reduction and Jawline contouring

Neck band reduction is performed by targeting the platysma muscle, which also ameliorates the signs of ageing by increasing the contour of the jawline. Contraction of the platysma expands and extends the skin in vertical lines that form bands in the anterior neck.

Platysma muscle:

The platysma is continuous with the superficial musculoaponeurotic system. It is a thin and broad muscle found directly underneath a thin layer of subcutaneous fat which cover most of the neck.

Function: Draws down the corners of the mouth and skin overlying the lower jaw.

Innervation: Cervical branch +/- marginal mandibular branch of the facial nerve

Arterial supply: Submental artery (facial artery) and the suprascapular artery (thyrocervical trunk)

Venous drainage: suprascapular vein (tributary of external jugular vein)

Attachments: Superiorly, the platysma originates from anterior third of the mandible, the cheek skin, the modiolus, orbicularis oris and posterior aspect of depressor anguli oris muscles. Inferiorly, the platysma merges with the fascia covering the anterior deltoid and pectoralis major.

Jawline lift (red dots on slide): Targeting the platysma muscle reduces its muscular tension and allows for the increase in the difference in projection between the mandible and the neck. Reducing the inferior pull of the platysma will also increase the superior pull of the lateral face elevators, reducing the jowls (sagging skin below the mandible). 2 units of OnaBoNT-A is injected per point (sub dermally). The injection should be run in two lines, the first line connects the chellion and base of the ear. The second line is parallel to this and two fingerbreadths inferior, just superior to the lower border of the mandible. Given the superficial position of the platysma, the injections should be carried out intra-dermally or just subdermally. To avoid injection into the depressor anguli oris injection should be placed laterally to the marionet lines (line formed at a 45 degree angle from the chellion) or at least 1cm lateral to the chellion.

Platysmal bands (green dots on slide): First, ask the patient to contract their platysma. Once the bands are visualised, pinch the bands that form on muscle contraction and insert needle to 1/3 its depth.

Important to avoid overdose of BoNT as this may cause paralysis of muscles of the neck, causing dysphonia and dysphagia. Diffusion of the toxin into the depressor labii inferioris or risorius muscle may result in smile asymmetry. The area is also prone to bruising.