FACIAL REJUVENATION

Off licence applications for botulinum toxin

Practitioners are treating a variety of sites with botulinum toxin, with good outcomes. By Dr Paul Charlson

ABSTRACT

Botulinum toxin is the most common aesthetic intervention. All GPs are therefore likely to encounter patients who have had this treatment for aesthetic purposes.

The traditional sites where botulinum toxin is used are the glabella, the brow and around the eyes to treat crow's feet.

This article outlines additional conditions that can be treated off licence with botulinum toxin.

Key words
Aesthetic medicine, botulinum toxin, cosmetic procedures, off licence applications

Many aesthetic practitioners will work off licence with some patients because product licences are very limited, both in terms of dosing and site of use.

Botulinum toxin, for example, is commonly used to treat wrinkling in the glabella, by treating mainly the procerus and corrugator muscles. It is also used to treat crow's feet by treating part of the orbicularis oculi, and in the brow by treating the frontalis muscle.

However, practitioners are treating a wider variety of areas with good outcomes (see box 1). Even in established sites, such as the brow, a thorough knowledge of facial anatomy and product allows brow shaping and natural asymmetry correction.

NEWER TREATMENT OPTIONS

Some patients have a hypertrophic orbicularis oculi, which causes a ridge under the eye. This can be softened and the palpebral aperture widened by injecting a small dose of botulinum toxin in the midline of each lower eyelid.[1]

In the midface, treatment with botulinum toxin in the upper face creates 'bunny lines', although sometimes these are naturally prominent. They are not aesthetically pleasing if they pass across the bridge of the nose or are excessive. Treatment in the upper lateral part of the nose intradermally with botulinum toxin is usually effective in ablating these lines.

In addition, the levator labii superioris alaeque nasi (LLSAN) muscle can contribute to bunny lines, but can also cause excessive elevation of the upper lip on smiling, creating a 'gummy smile'. Treating the LLSAN is therefore also effective in reducing a gummy smile.[2]

Ageing in the lower face creates a variety of features that can be treated with botulinum toxin alone, but usually in combination with other treatments, such as dermal fillers, skin tightening and thread lifting, as well as surgery.

One of the most common problems that patients consult aesthetic doctors about are perioral or smokers' lines. These are usually treated with dermal fillers, but adding botulinum toxin to this treatment can be effective, with small doses placed just outside the lip line.[3]

Another feature is increased activity of the depressor anguli oris muscle, combined with ageing, leading to downturned mouth corners (or 'cod mouth').



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Botulinum toxin can offer good outcomes in a range of areas

Treatment of the lower part of this muscle is effective, with some risks of affecting adjacent muscles if treated too medially.

Mentalis hyperactivity causes the 'dimpling' chin and this is treated with about three to five units of botulinum toxin on each side of the midline.

Unlike the upper face, these lower facial muscles affect speaking and chewing, so the goal of treatment is relaxation rather than complete paralysis of the target muscles.

Another important area where botulinum toxin has a role is in treating the masseters. Masseter hypertrophy is more common in patients from east Asia. However, it is also seen in patients with bruxism.

Treatment of the masseters using botulinum toxin reduces the width of the lower face, which is deemed by some to be aesthetically desirable in women, creating a face shape nearer to the 'golden ratio'.[4] This intervention also provides relief from the pain of bruxism.

The neck is often ignored when treating the face, so it is important for the aesthetic physician to assess this when making recommendations regarding treatment options.

The platysma muscle is a major depressor of the lower face. Treatment of this area is particularly effective in thinner individuals who work out, as they develop platysmal bands and a disappearing jawline with platysmal contraction. The Nefertiti lift, using botulinum toxin to the jawline and platysmal bands, can provide a good result.[5]

SAFETY CONSIDERATIONS

The aesthetic use of botulinum toxin is increasing, both in the numbers of patients who are being treated with it and in the scope of its application.

Side-effects associated with botulinum toxin are generally minor and short-lived. They are usually caused by injection into the wrong muscle group, leading to brow or lid ptosis, drooping of the mouth or masseter weakness. Other adverse events from cosmetic use include bruising, headaches, dysphagia, flu-like syndromes, blurred vision, dry mouth, fatigue, allergic reactions and swelling or redness at the injection site.[6]

Botulinum toxin can produce excellent outcomes. However, the industry is poorly regulated and many practitioners have little or no training in its use and applications.

The result of this may be suboptimal aesthetic outcome and sometimes, adverse clinical effects. However, for many patients, price is the key deciding factor in choice of practitioner, which can be a false economy. ■

Dr Paul Charlson is a GP with an extended role in dermatology in East Yorkshire

Competing interests: Dr Charlson is medical director of Skinqure Clinic. He is also president of the British College of Aesthetic Medicine, which has a register of suitably qualified aesthetic doctors

BOX 1: TREATMENT WITH BOTULINUM TOXIN

Cosmetic conditions that can be treated with botulinum toxin

- Wrinkles in glabella and brow
- Crow's feet
- Hypertrophic orbicularis oculi
- Bunny lines
- Gummy smile
- Perioral or smokers' lines
- Depressor anguli oris (cod mouth)
- Chin dimpling
- Masseter hypertrophy, bruxism
- Platysmal bands

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