Facial Reshaping

Dr Steven Harris on taking a holistic approach to facial rejuvenation

Among the 15.5 million non-surgical cosmetic procedures performed last year in the United States, botulinum toxin type A (BTA) was rated number one at seven million (up 4% from 2015) followed by dermal fillers at 2.6 million (up 2% from 2015).[1] The large disparity between the top two procedures suggests that we are failing to see the 'bigger picture'; we are still preoccupied with the correction of facial lines and wrinkles, especially in the upper third of the face rather than shape and proportions involving the face as a whole.

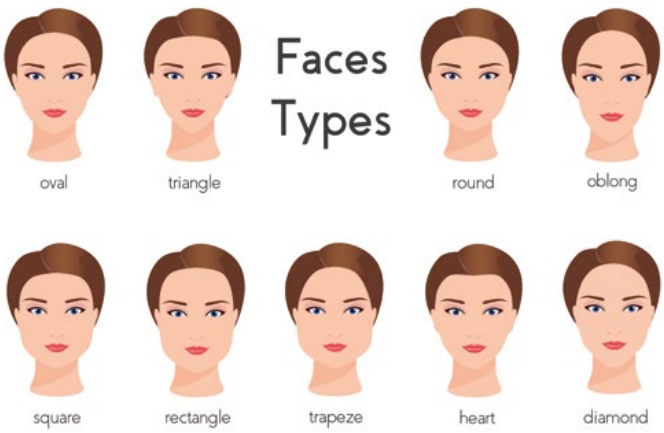

Figure 1: Facial shapes

While treatment with BTA often does lead to an overall improvement, there can also be a mismatch between the treated area and the rest of the face so that overall the patient looks worse.

A holistic approach to facial rejuvenation is needed to ensure a more natural and balanced result; this is best achieved with the use of hyaluronic acid (HA) dermal fillers to help restore facial shape and proportions.

THE AGEING FACE

Patients typically present for correction of lines in the upper third of the face including the frown, forehead and crow's feet with BTA. They may also wish to correct folds such as the nasolabials using HA dermal fillers. While these treatments can lead to an aesthetically pleasing result, they can also have the opposite effect if the facial shape is not initially addressed.

A simple analogy may be drawn comparing the shape of the face to a house where the windows represent facial lines. If the house is in relatively good condition, then fixing the windows will lead to an overall improvement in appearance. However, if the house requires structural repair, then fixing

the windows will accentuate the poor condition of the house. Similarly, if a patient has lost their ideal facial shape, then correcting lines will emphasise the lack of facial structure, leading to an overall poor aesthetic result.

There is no clear definition of the "ideal face". The four traditional facial shapes have been described as oval, round, heart and square, although more have been identified (Figure 1). Women and men consider the oval shape ideal for each other, but for themselves women prefer a heart shape while men prefer a square shape.[2] A well-defined outline with prominent zygomatic arches appears to be an attractive feature.

In women, the eyebrows are arched, the zygomatic arches have more lateral projection and the jawline tapers toward a smaller chin; in men, the eyebrows are flat, the zygomatic arches have more medial projection and the jawline is square with a prominent chin.

The length of the ideal face is 1.5 times the width; the bigonial width is approximately 30% less than the bizygomatic dimension (1.3:1 for women and 1.35:1 for men).[3] A narrowing of the bigonial width may be achieved by injecting BTA into the masseter muscles; a widening of the bigonial width may involve deep filler injections 1cm diagonally from the gonial angle. With advancing age, the skeletal framework continually increases in size with selective resorption in certain areas. The soft tissues tend to reduce in size and atrophic laxity leads to their descent. As a result, the face loses its definition and the patient appears tired and "saggy".

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AN APPROACH TO TREATMENT

In restoring the outline of the ageing face, it is critical to have an understanding of the ageing process in order to tackle the problem at the source; for example, the jowls are initially addressed at the midface with replacement of the lost volume.

The weakest areas are always treated first with a "less is more" approach; it is much easier to do "touch-ups" at a later date, rather than correct overfilled areas. Unfortunately, the mid-cheek is an area frequently over-treated, leading to the pillow-face effect; the lateral cheek (posterior to the zygomaticotemporal suture) is often ignored; the latter is an integral part of the ideal shape; it helps reshape the eyebrows and lends definition to the jaw and chin.

The lateral cheek may be treated with one or two injections (around 0.1-0.2mls each) placed deeply on to the periosteum 1cm above the palpable border and posterior to the zygomaticotemporal suture. Treating this area raises the corners of the eyebrows by inhibiting the contraction of orbicularis oculi, referred to as "myomodulation".

The corners may also be lifted by filling in the temples, or raising the eyebrow manually and placing a small bolus of filler on the bone just below to hold position. Another option is to treat the depressor muscles (procerus, corrugators and orbicularis oculi) with BTA and the elevator frontalis muscle in a V shape distribution.

The lateral cheek should always be considered in conjunction with the chin as the one enhances the appearance of the other. A single deep injection into the tip of the chin (around 0.2-0.5mls deeply in the midline) may be all that is required to help restore a heart shape face (Figure 2,3,4). >

Figure 2: Before and after filler treatment of the lateral cheek and chin with Juvederm Voluma (1ml), by Dr Steven Harris

Figure 3: Before and after filler treatment of the lateral cheek and chin with Juvederm Voluma (2mls), by Dr Steven Harris

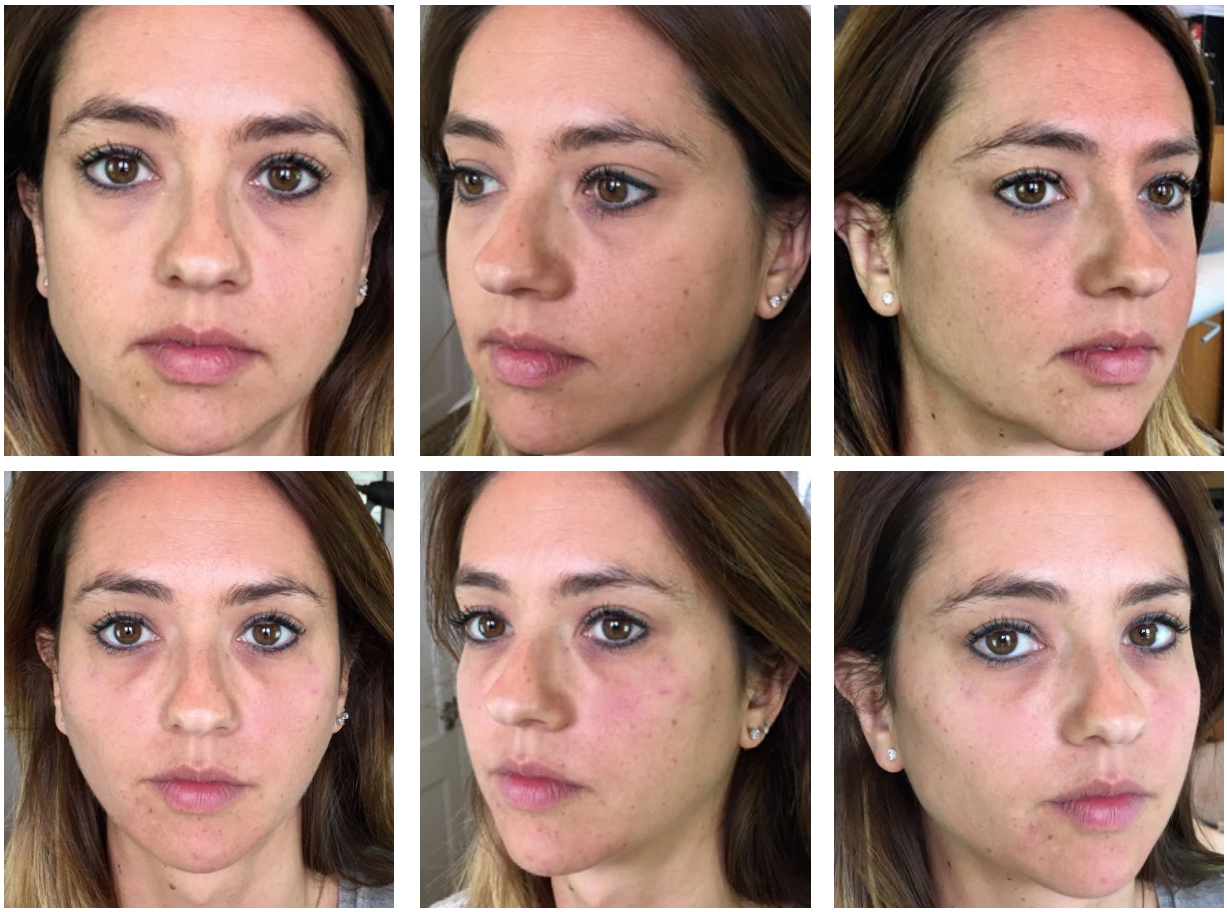

Figure 4: Before (top) and after (bottom) filler treatment of cheeks and chin to restore a heart shaped face with Juvederm Voluma (2mls) and tear trough area with Juvederm Ultra 3 (1ml), by Dr Steven Harris

The jaw-line may be thought of as completing the ideal shape of the face at the apex; it may be defined as a line running along the inferior border of the mandible, from the mental protuberance (anteriorly) to the body, angle and ramus of the mandible (posteriorly). A poorly defined jaw-line may be treated along multiple vectors: superiorly with volume replacement in the mid-face; inferiorly, with BTA injections into depressor muscles in the so called 'Nefertiti lift'; anteriorly with deep injections of filler to restore the projection of the chin and the pre-jowl area; posteriorly, with superficial filler injections into the post-jowl area, or deeply at the gonial angle. It is important to consider treating the post-jowl area before the pre-jowl as the latter can accentuate the jowl itself and makes the face appear more squared shape. On the other hand, treating the post-jowl has more of a lifting effect on the jowl and makes the face appear more oval, or heart shaped (Figure 5).[4]

In conclusion, it would appear that a more holistic approach involving injectables is necessary to achieve a consistently pleasing aesthetic result. The holistic approach represents a movement away from treating areas in isolation mainly with BTA, toward considering the face as a whole and restoring the ideal facial shape mainly with HA dermal fillers. In doing so, it is important to have an understanding of the ageing process and the relationships between the different components of the face, in particular, the eyebrows, zygomatic arches and chin. These key players have an interrelated dynamic relationship where treating one affects the appearance of the others and ultimately it is the skill of the injector which will determine how these dynamics play out for the final aesthetic result. **AM**

Figure 5: Before and after filler treatment of the post-jowl area, by Dr Steven Harris

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Dr Steven Harris MB BCh, MBCAM, MSc completed his medical studies in Johannesburg in 1997. He has been practising aesthetic medicine at his clinic in North London since 2004 and has gained a reputation for producing entirely natural looking results. Dr Harris also completed an MSc in Cognitive Behaviour Therapy in 2005 and specialises in the management of patients with Body Dysmorphic Disorder. He publishes and lectures regularly in both areas of aesthetic medicine and clinical psychology.