

## Case Study: Transgender Feminisation Treatment



### Miss Natasha Berridge presents a case combining both surgical and non-surgical techniques to address a transgender female patient's gender dysphoria

The term 'transgender and gender diverse' (TGD) refers to individuals with gender identities or expressions that differ from the gender socially attributed to the sex assigned to them at birth.<sup>1</sup> According to a recent health-system based study, the reported proportion of TGD individuals ranges from 0.02% to 0.1% of the global population.<sup>1</sup> Within the literature, there is overwhelming evidence that gender-affirming facial interventions such as surgery and minimally invasive procedures (like injectables and facial hair removal) significantly improve the quality of life and psychosocial wellbeing of TGD individuals.<sup>2</sup>

#### Affirming identities

Facial feminisation is a medically necessary clinical intervention for many transgender women, as it not only supports their transition socially, but can also alleviate the psychological distress and dysphoria associated with gender incongruence.<sup>3</sup> As a medical professional providing care to TGD individuals, it is imperative to have a sound anatomical understanding of the facial features associated with gender incongruence. Inherently, the female face is distinctly different to the male face, primarily related to the effects of the sex hormones on the underlying facial skeleton and overlying soft tissues. The masculine face is more angular, with a prominent forehead/browbone and chin/jawline, M-shaped hairline with potential temporal recession, flatter low-set eyebrows, longer and broader noses, flatter malar eminences, thinner lips with longer nose-upper lip distance, prominent laryngeal cartilage, coarser more sebaceous skin and differences in the distribution of facial hair and fat.<sup>4,5</sup> Transgender women may be taking feminising hormones (oestrogen and/or a testosterone blocker) to support their medical transition. Oestrogen hormone treatment in transwomen induces a softening of the skin, reduction in skin oiliness and facial hair distribution, as well as an increase in cheek fat within three to six months.<sup>16</sup> Fortunately, given the

considerable developments in non-surgical aesthetic techniques, facial feminisation is no longer only achievable surgically. There is not a 'one size fits all' approach for patients wishing to feminise the appearance of their face, and gender-affirming facial interventions are tailored to the individual's unique transition journey. In my surgical practice, injectable treatments such as botulinum toxin and dermal fillers play an important role in the surgical transition journey of our TGD patients. Additionally, some patients opt solely for non-surgical facial feminisation with injectables for a variety of reasons, including reduced associated risks, non-permanency and lower financial burden. It is acknowledged that there has been increased visibility for trans people, coupled with marked advances in the care of TGD individuals in recent years. Medical professionals are now able to offer TGD individuals a comprehensive variety of gender affirming procedures. This case study highlights the complementary nature of surgery (performed by another practitioner) and injectable treatments in providing transgender feminisation.

#### Patient presentation

A 59-year-old Caucasian transgender female presented to clinic seeking gender affirming facial feminisation to alleviate the dysphoria associated with her large 'masculine' nose, high frontal hairline and prominent Adam's apple, in addition to her jowls which she felt were prematurely ageing her. She was fit and well and had no reported mental health issues. She had been receiving gender affirming feminising hormone treatment (oestrogen gel) for four years prior to consultation. Additionally, she was also taking finasteride to prevent scalp hair loss. She had no known drug allergies, was a non-smoker and infrequently drank alcohol. Clinical examination findings revealed a markedly high frontal hairline with low set brows and marked lateral hooding, a masculine nose with moderate dorsal hump,

ptotic tip and markedly deviated septum (from previous nasal trauma in adolescence). An elongated upper lip with minimal vermilion show, moderate jowls with skin laxity and notable wrinkles in the upper face, particularly in the periorbital region, and a moderately prominent Adam's apple can also be seen (Figure 1).

The patient expressed her desire for a 'natural' feminisation, not only to ease the burden of the highlighted masculinising features, but also to address ageing soft tissues. As part of the pre-operative work-up, relevant imaging and bloods were requested, in addition to a formal referral letter from a Health and Care Professions Council (HCPC) registered mental health professional. The definitive treatment was planned as staged procedures, with secondary facial rejuvenation being performed eight weeks after surgical intervention (Figure 2) as detailed below.

#### Stage one – facial feminisation surgery (FFS)

1. Hairline/scalp advancement
2. Brow lift
3. Feminising septorhinoplasty
4. Upper lip lift
5. Lower face lift
6. Thyroid cartilage reduction, otherwise known as chondrolaryngoplasty

#### Stage two – non-surgical facial rejuvenation

1. Botulinum toxin type A (using Bocouture from Merz Aesthetics) to address the dynamic wrinkles in the upper part of the face (targeted orbicularis oculi muscle), maintain brow position (targeted corrugator and procerus muscles) and improve chin aesthetics (targeted mentalis muscle hyperactivity to accentuate projection and contour)
2. Hyaluronic acid (HA) dermal fillers (using Ultra Deep, RHA 4 and RHA Kiss from Teoxane) in the malar region to improve cheek contour and projection, in the lips/perioral region to add volume/structural support and in the chin to create a more heart-shaped lower face
3. Regular at home daily skincare routine (using SkinCeuticals) to address the effects of long-term sun exposure and improve textural skin changes

#### Post-treatment care

Routine aftercare was performed and regular follow-ups were scheduled for the patient at 10 days, three weeks, six months and

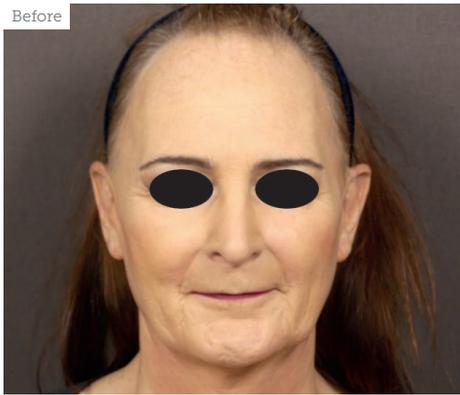


Figure 1: 59-year-old Caucasian transgender female presenting with gender dysphoria associated with masculine hairline, nose, long thin upper lip and dislike of jowls. Image courtesy of Mr Christopher Ingfield, London Transgender Clinic.



Figure 2: Post-operative image, taken six months after FFS which involved hairline advancement, brow lift, feminising septorhinoplasty, upper lip lift, lower face lift and thyroid cartilage shave. Image courtesy of Mr Christopher Ingfield, London Transgender Clinic.

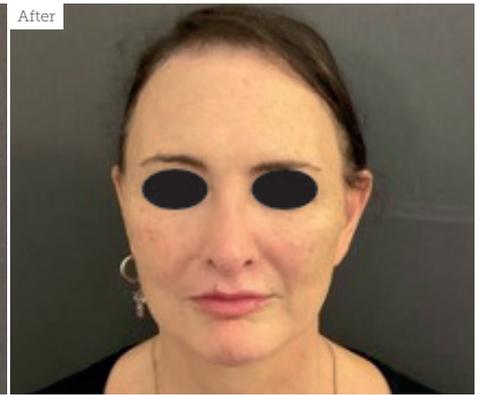


Figure 3: Two weeks after non-surgical facial rejuvenation with botulinum toxin to the corrugator, procerus, frontalis, orbicularis oculi and mentalis muscles, and HA-based dermal filler injected to augment the malar regions, lips and chin

one year post-operatively. The patient had an acceptable degree of post-operative surgical oedema that responded well to a cooling therapy device (Hilotherm). Aside from the expected temporary neurosensory impairment of the small areas of the scalp and forehead (typically lasts up to 12-18 months), there were no other reported associated risks. Only one session was needed for the injectable treatments, and the patient did not report any complications associated with these minimally-invasive procedures. The patient had an uneventful post-operative course and was delighted with the aesthetic outcome of her combined chosen surgical and non-surgical treatments (Figure 3). Furthermore, the process of facial feminisation has undoubtedly significantly improved the patients' self-confidence, thereby positively impacting upon her psychosocial functioning.

### A unique approach

Not every transgender female wants or needs facial feminisation as part of their transition. For those who wish to feminise their face, it is imperative that practitioners manage their expectations for what is achievable. Practitioners and patients need to work closely during consultations to facilitate an individualised approach to facial feminisation. During the informed consent process, I ensure my patients are aware of the comprehensive range of surgical and non-surgical options available. It is important to highlight that a TGD individual's decision to accept a treatment option will not only be determined by need/preference, but also by the phase of their transition. For example, the growth of primary sexual characteristics such as the forehead/brow bone, nose, chin/jawline and thyroid

cartilage will not be medically reversed by taking feminising hormones. These masculine features are typically modified with facial feminisation surgery, or if deemed to be mild, can be camouflaged with dermal fillers. Exogenous hormonal influence can lead to changes in male secondary sexual characteristics such as frontal/temporal hairline, distribution of facial hair and fat and skin quality. I typically recommend patients undergo a minimum of six months of feminising hormones before surgical options are discussed to modify these hormonally influenced features.

Minimally-invasive treatments play an important role in my clinical practice for facial feminisation. Botulinum toxin can be used to feminise the brow complex, periorbital, perioral and lower facial regions. The feminising effects of neurotoxin in these areas will lift the brow complex, widen the eyes, soften rhytids (thereby impacting the textural appearance of the skin), improve vermilion lip eversion and create a softer, heart-shaped lower face. Specifically, the latter effect is achieved via a combination of neurotoxin injected into the masseter muscles to induce atrophy and/or mentalis muscle if hyperactivity is evident. Additionally, HA dermal fillers can be used to feminise the forehead, nose, malar and chin regions. The feminising effects of filler will soften a prominent supraorbital ridge, acute frontonasal transition and nasolabial angle, enhance prominence of the cheekbones and create a more pointed chin. In general, larger amounts of these injectables are needed to feminise a transgender female compared to a cis-gender female of the same age, due to greater underlying muscle mass and bone structure in those individuals assigned male at birth.<sup>7</sup>

Moreover, common feminising effects of

oestrogen on the skin include a reduction in oiliness and facial hair growth, increased epidermal thickness and melanocyte activity.<sup>8</sup> Such effects may make transgender women's skin more prone to dryness and itchiness.<sup>8</sup> It is therefore important to encourage transgender patients to follow a daily skincare regime to maintain good skin health. We should not underestimate the powerful impact of skin quality in optimising the outcomes of surgical and/or non-surgical treatments, as well as gender perception.

### Holistic care

Although there are no specific guidelines for the exact timing of facial feminisation, practitioners must remain mindful that the provision of such treatment will support male-to-female TGD patients in their social, medical and psychological care.



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