

Introduction

- Non-invasive dermatological procedures such as neuromodulators and injectable filler are often sought out in LGBTQ+ and gender-diverse patient populations.
- Botulinum toxin A (BoNT-A) is a particularly common intervention that aids in recontouring facial structures for the purpose of gender-affirmation among transgender women.
- However, there are currently no studies summarizing the use of facial BoNT-A among transgender women.
- Objective: identify unique considerations for facial BoNT-A use among transgender women.

Methods

A literature search was conducted to evaluate the use of BoNT-A among transgender women. The search terms “transgender”, “transfeminine”, “gender diverse”, “trans woman”, “botulinum toxin”, “botulinum toxin A”, and “Botox” were used in PubMed, Google Scholar, and Scopus. Studies were excluded if they did not explicitly discuss facial BoNT-A use or they did not include transgender women. All study types including case reports, case series, cohort studies, case-control, retrospective, prospective studies, and cross-sectional studies were included in search criteria.

Results

A total of 7 studies discussed facial BoNT-A use among transgender women. From our literature search, the use of BoNT-A in gender-affirming care, anatomical considerations for BoNT-A, injection techniques, estrogen considerations, complications of injections, and barriers to care were extracted for analysis and discussion.

BoNT-A as Gender-Affirming Care

- Facial feminization interventions among transgender women have been shown to reduce rates of gender dysphoria, the experience of one’s sex assigned at birth not aligning with their gender identity.
- The pursuit of these procedures can significantly impact social functioning and improve mental health among both transgender men and transgender women.

Anatomical Considerations

- In the upper face, BoNT-A is commonly used to raise the soften forehead wrinkles and brow ridges, widen eye aperture, and decrease sebaceous activity and pore appearance.
- In the middle face region, BoNT-A was used to reduce sebaceous activity in malar surfaces, lift the nasal tip, and augment the zygomatic arches.
- For the lower facial regions, BoNT-A was used to induce atrophy of the masseter muscles, achieve a slimmer facial architecture, and augment chin shape. Direct injection of BoNT-A into the masseter muscles helped minimize prominence of the jawline and created a “heart-shaped” facial architecture that was highly sought out by several transgender patients.

Injection Approaches

- Patients received an average of 74 units of incobotulinumtoxinA in the upper face, microdroplets with an average of 0.5 units per injection on each side of the middle face, and 43 units of incobotulinumtoxinA in the lower facial regions.
- Patients received a range between 4 and 12 units of onabotulinumtoxinA on the lateral aspect of supraorbital ridges in order to create a lifted eyebrow architecture.
- Treatment of masseter hypertrophy required greater units, ranging between 20 to 35 units of incobotulinumtoxinA on each side of the face.

Estrogen and BoNT-A

- Estrogen therapy among transgender women has been associated with increased risk of developing deep vein thrombosis (DVT) and polycythemia.
- There are limited studies evaluating direct interactions between BoNT-A and estrogen. However, a recent animal study found that intramuscular injection of BoNT-A led to significantly lower levels of FSH and LH and higher levels of progesterone.

Complications and Barriers

- Common complications of BoNT-A include pain at injection sites, swelling, asymmetry, ptosis, and redness.
- Barriers to care: cost concerns, distrust in the medical system, discrimination by healthcare providers.

Discussion

- Facial BoNT-A is frequently used among transgender women in the pursuit of gender-affirming care. While the pursuit of these procedures is often depicted as being sought out for cosmetic reasons alone, BoNT-A serves as a powerful tool to address gender dysphoria and improve mental health among transgender women.
- Anatomical considerations and desired aesthetic outcomes by facial region are crucial to understand when administering BoNT-A injections.
- Since many transgender women use estrogen therapy as components of gender-affirming care, dermatologists must be aware of hormonal dysregulations and DVTs as possible complications of concurrent BoNT-A use.
- Barriers to access among transgender women is common, which may lead to possibly dangerous pursuits of dermatological procedures from unlicensed practitioners.

Conclusion

Overall, dermatologists must understand the unique considerations of BoNT-A use among transgender women to provide comprehensive, inclusive care to underrepresented LGBTQ+ patient populations.

References

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