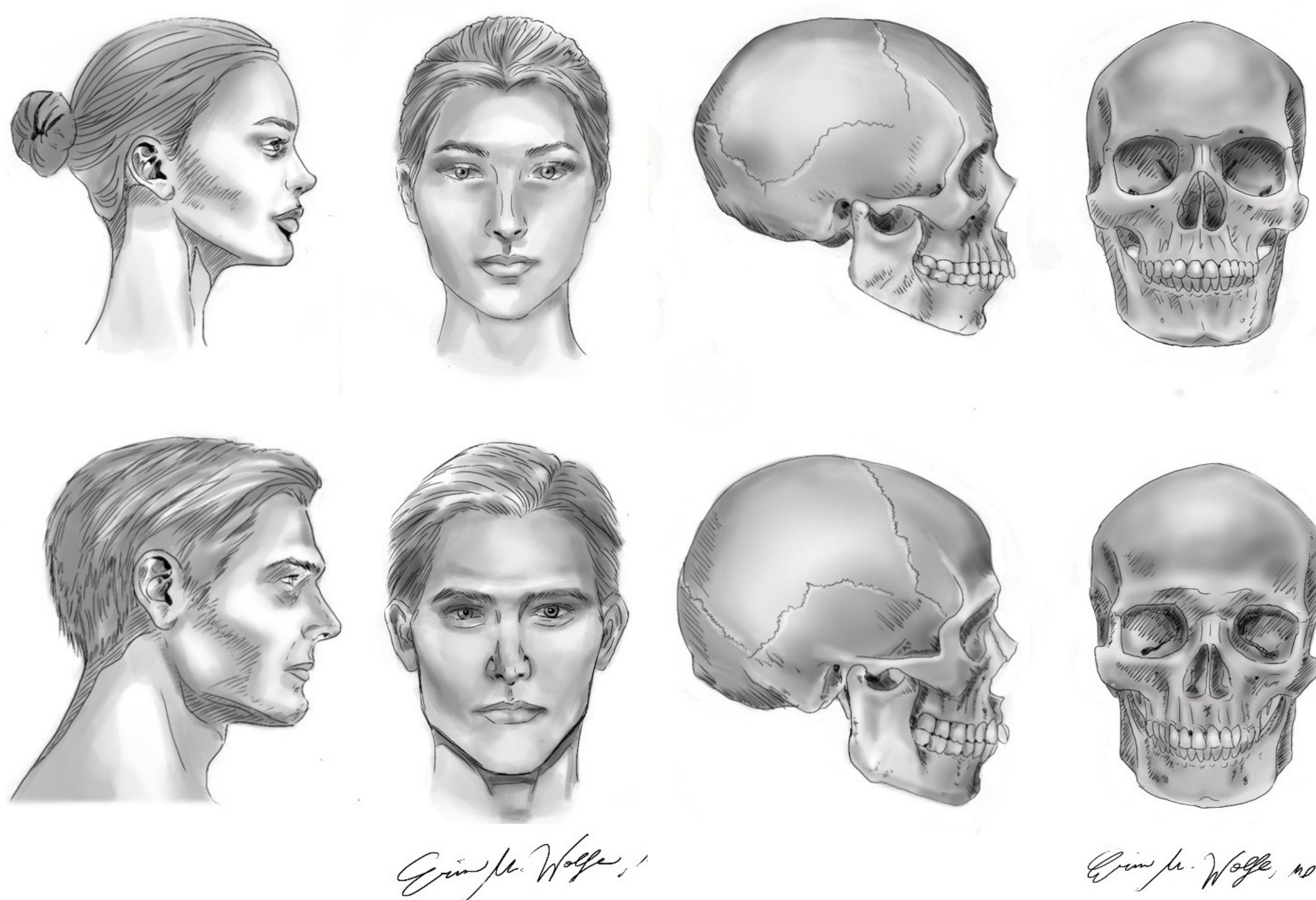


Feminization Of The Forehead: A Systematic Literature Review And Cohort Study Of Transfeminine Patients

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Introduction



O shape hairline
Short non-hair bearing forehead (~5 cm)
Round, convex shape
Eyebrows above supraorbital ridge

M shape hairline
Temporal recession
Long non-hair bearing forehead (6-8 cm)
Eyebrows at supraorbital ridge
Supraorbital bossing

Methods

Retrospective Chart Review

Transgender female and non-binary patients undergoing feminization of upper third of face

- 1 Demographic factors
- 2 Pre-operative assessment
- 3 Operative details
- 4 Complications
- 5 Re-operations

Scoping Literature Review

THE SEARCH

Terms: “forehead feminization,” “forehead feminization surgery,” “frontal sinus setback,” feminizing brow lift,” and “gender non-conforming forehead feminization”

INCLUSION CRITERIA

Articles written in English, transgender female or non-binary patients undergoing feminization of upper third of face, clinical study / case series

EXCLUSION CRITERIA

Articles with patients undergoing prior facial procedures

FINAL REVIEW

Consists of retrospective cohort studies & case reports on forehead feminization in transgender female and non-binary populations

Results

Literature Review – n=22 articles

Forehead Contour

Goals: reduce supra-orbital bossing, contour rounded orbital rim, widen nasofrontal angle

Techniques

Type 1: burring only, Type 3: anterior sinus setback with split calvarial bone graft, fixation with titanium plates versus mesh; bone dust to fill in gaps

Hairline Shape & Position

Goals: advance hairline, create rounder shape, and address temporal recession

Preticheal incision vs coronal incision
Senior author's technique: incision along hairline anteriorly and extended to a coronal incision posterolaterally.; fat grafting to temples

Brow Position

Goals: position above supraorbital ridge, point of arc at lateral limbus

Endoscopic versus coronal brow lift versus creation of brow channels

Case Example



Cohort – n= 85 patients

Demographics

Gender Identity: 93% transgender
Age: 32.4 (9.9) years
Ethnicity: Caucasian (56%), Hispanic (24%), Asian (7%), African-American (5%)
Ousterhout: Type III (92%), Type I (8%)

Operative Details

Incision: preticheal anteriorly, coronal posterolaterally (87%), coronal (13%)
Brow lift: temporal skin excision (62%); bone channels (34%), coronal brow lift (4%)
Frontal sinus reconstruction: split calvarial bone graft (92%), metal plate (90%) versus titanium mesh (2%)
Average Setback: 4.12mm

Complications & Re-Operations

Mucocele – 1%
Bony recontouring – 1%
Forehead scar revision 6%
Brow lift revision – 1%
Removal of hardware – 1%

Conclusion

The core tenets of the feminization of the forehead lie in the overall creation of a harmonic curvature of the forehead with other facial features. Our multi-pronged analysis presents an updated review of these principles, which may help plastic surgeons in performing procedures to feminize the upper third of the face.