Development of a treatment protocol for female feminization surgery

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Objective

Facial feminization is an important step in the surgical transition process of male-to-female gender dysphoria patients. Because of the variance of facial features, patient`s expectations and a wide range of surgical techniques proper surgical planning for this critical area of the body is difficult. In order to develop a treatment protocol for surgical facial feminization, we present our approach for gender dysphoria patients undergoing facial feminization at our institution.

Methods

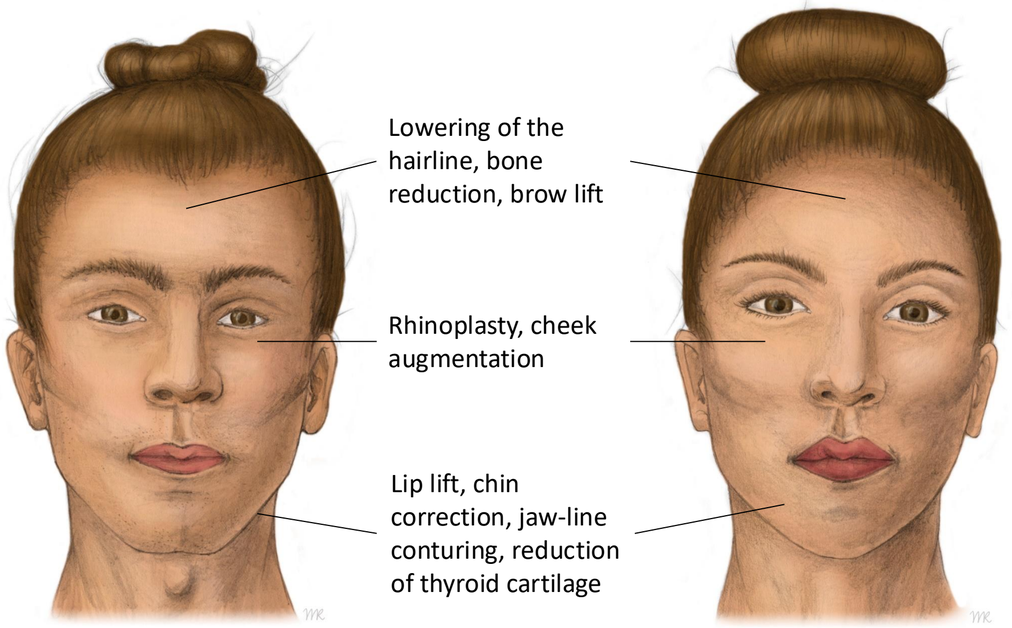
After psychiatric evaluation and hormone treatment, gender dysphoria patients with the wish for facial feminization undergo a schematic facial analysis during our outpatient consultation. Computer tomography imaging and clinical photographs are used to create 3D models for surgical planning. By establishing the necessary alterations to the craniofacial bone structures and soft tissue of the face, each patient receives an individualized treatment plan. If needed, interdisciplinary surgical planning with the Maxillofacial - or Otorhinolaryngology department is carried out.

Results

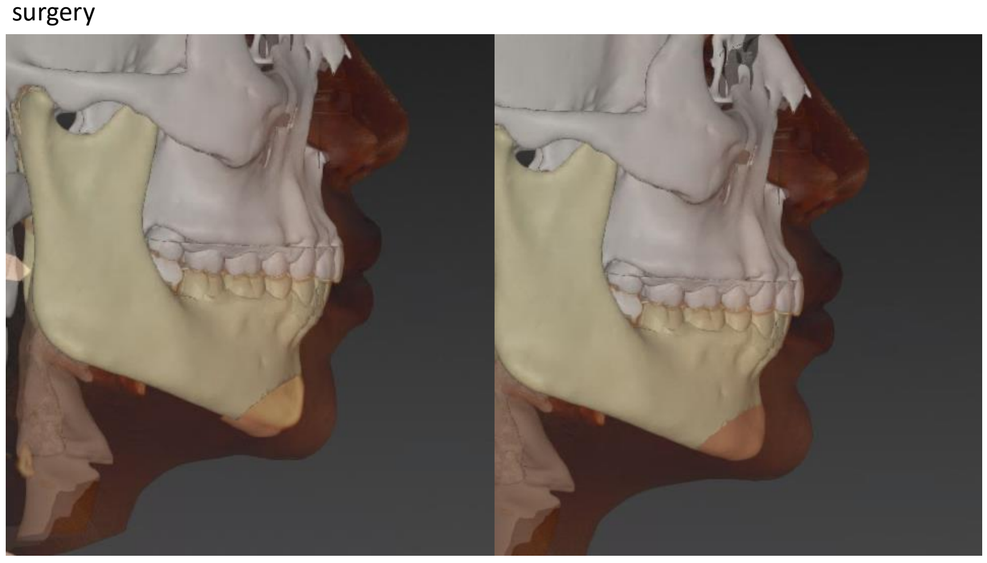
The facial features are divided into three vertical sections. For softening of the upper third of the face we perform a forehead reduction including bone shaving, osteotomies und repositioning of the anterior wall of the frontal sinus, if necessary combined with hairline lowering and correction of brow position. To feminize the midface, we offer a feminizing rhinoplasty, cheek augmentation and upper lip lift. In the lower third of the face, we combine osteotomies and burring of the jawline and chin using a transoral approach during a multidisciplinary procedure. Sliding genioplasty or chin augmentation are indicated in cases of disproportional lower face. Reduction of thyroid cartilage is performed by direct access in the cervicomental fold. All patients receive compression, hilotherapy and lymphatic drainage during the short postoperative phase, to improve recovery. Perioperative complications are rare. Postoperative patient satisfaction is generally high.

Conclusion

We believe that a comprehensive treatment concept at a multidisciplinary center combining a standardized facial analysis, matching the patient`s needs and expectations and the use of the proper surgical techniques, lead to improved postoperative outcomes. By sharing our experience and insight into our protocols, we contribute to the development for common consensus in the field of facial feminization surgery, which is supported by increased evidence.



Picture 1: Three vertical sections of the face and techniques for face feminization surgery



Picture 2: Virtual surgical planning using 3D Simulation Software (KLS Martin IPS CaseDesigner®)

Picture 3: Pre- and postoperative appearance after closed rhinoplasty and genioplasty

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