



The Importance of Nipple–Areola Complex Position in Chest Masculinization Surgery

Sara Tanini¹ · Sara Calabrese¹ · Giulia Lo Russo¹



Received: 26 March 2020 / Accepted: 26 March 2020 / Published online: 15 April 2020
© Springer Science+Business Media, LLC, part of Springer Nature and International Society of Aesthetic Plastic Surgery 2020

Level of Evidence V This journal requires that authors assign a level of evidence to each article. For a full description of these Evidence-Based Medicine ratings, please refer to the Table of Contents or the online Instructions to Authors www.springer.com/00266.

Dear authors,

We read with great interest the work entitled “Nipple–Areolar Complex Position in Female-to-Male Transsexuals After Non-skin-excisional Mastectomy: A Case–Control Study in Japan.” by Akira Momosawa et al. [1].

In this article, the authors examined the NAC position in 41 Asian FTM TS patients pre- and post-non-skin-excisional mastectomy and subsequently compared it with that of age- and BMI-matched biologically male subjects. Stating the reported tendency of the NAC to medialize after surgery, they proposed the laterally deviated eccentric circular-type mastectomy to correct within the first surgery the NAC position [1].

In accordance with the existing literature, mastectomy method in transmen is usually selected in relation to breast size, degree of ptosis and skin elasticity [2]. Given the difficulty to standardize the above-mentioned parameters, the authors mentioned that they tended to select the surgical procedure basing the choice rather on clinical judgments, ultimately mostly opting for the smallest possible skin incision [1]. We agree with the authors that every single variable must be considered for better personalizing of the surgical method to the individual patient, but it is though important to underline that a small scar is not

properly synonymous of better aesthetic outcome [2–6]. Numerous studies have been performed to outline the ideal male chest and NAC size/position in males using a variety of measurements and formulas [3, 4]. Whether we agree with the authors that the chest masculinization surgery should lateralize the NAC, one would have to consider that the female NAC is more medial but in concert more caudal than the male one. The approach proposed by the authors, though, appears ideal to re-locate the NAC on the horizontal axis but may fail to re-position it on the vertical one [1]. Nevertheless, we believe that equations to assist the surgeon quantify where the NAC should be placed on the chest wall are difficult and inconvenient to apply [3]. The use of landmarks such as inter-nipple distance, sternal notch to nipple height or sternal notch to umbilicus height and others, may vary in overweight patients and in the operating room due to horizontal and non-ideal patient position. Our experience led us to consider the pectoralis major muscle (PMM) as a guide in our planning and performing chest masculinization surgery. Using the anatomical features of the objectively ideal male chest of water polo players, we have demonstrated a constant and consistent relationship between the position of the NAC and PMM. We were thus able to develop an easy and immediate technique to find the ideal position of the NAC that, in case of circumareolar mastectomies, is performed at the moment of the preoperative drawing. In FTM patient candidates for non-skin-excisional mastectomy, indeed, the triangular-shaped PMM is easily identifiable and palpable. We plan the mastectomy as shown (see Fig. 1).

Asking the patient to contract the PMM in an upright position, we draw bilaterally an oblique line through the free margin of the PMM and a horizontal line through the inferior margin of the muscle. To center the NAC, we

✉ Giulia Lo Russo
giulialorusso70@gmail.com

¹ Department of Plastic and Reconstructive Microsurgery,
Careggi University Hospital, Florence, Italy

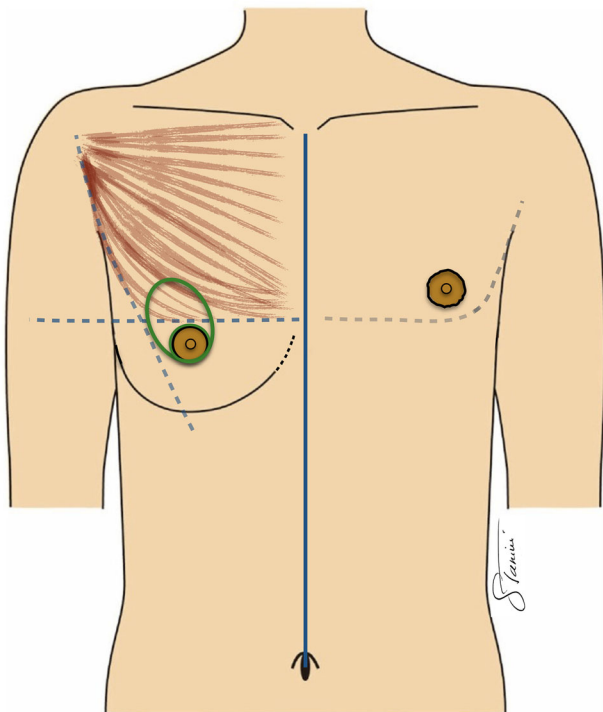


Fig. 1 The right part of the figure shows the preoperative mastectomy drawing with the used landmarks: the median line (in red), free and inferior margins of PMM (blue dashed lines), skin incisions (in green). The left part shows the final aesthetic outcome, with a circumareolar scar and a normally located (more lateral and cranial) NAC in relation with the PMM

calculate circa 3 cm medial to the lateral border of the PMM and 2.5 cm above the inferior PMM insertion.

With this simple technique, we thus set the goal to create a more lateral and at the same time more cranial neo-NAC.

By our experience, an accessible landmark such as the PMM guided NAC repositioning and symmetry in each type of mastectomy since it is present in each individual, regardless of gender or body type. We use the described technique both in *cis*-gender males after massive weight loss or for high-grade gynecomastia and in FTM patients who require male chest contouring independently from

race, body/chest type and BMI, achieving a high degree of patient satisfaction [3, 4].

Funding None.

Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflict of interest to disclose.

Human and Animal Rights This article does not contain any studies with human participants or animals performed by any of the authors.

Informed Consent For this type of study, informed consent is not required.

References

1. Kagaya Y, Shiokawa I, Karasawa H, Ono K, Momosawa A (2019) Nipple–areolar complex position in female-to-male transsexuals after non-skin-excisional mastectomy: a case-control study in Japan. *Aesthetic Plast Surg* 43(5):1195–1203
2. Lo Russo G, Tanini S, Innocenti M (2017) Masculine chest-wall contouring in FtM transgender: a personal approach. *Aesthetic Plast Surg* 41(2):369–374
3. Tanini S, Lo Russo G (2018) Shape, position and dimension of the nipple areola complex in the ideal male chest: a quick and simple operating room technique. *Aesthetic Plast Surg* 42(4):951–957
4. Tanini S, Lo Russo G (2019) Reply to commentaries on: opinions on the “trick” technique to reposition the NAC in female-to-male transsexuals. *Aesthetic Plast Surg* 43(1):280–281
5. Lo Russo G, Tanini S (2019) Modified nipple flap with free areolar graft for component nipple–areola complex construction: outcomes with a novel technique for chest wall reconstruction in transgender men. *Plast Reconstr Surg* 143(6):1309e–1310e
6. Tanini S, Calabrese S, Fisher AD, Maggi M, Lo Russo G (2020) When testosterone needs to be contrasted: a preliminary study of scar prevention in transmen top surgery with an innovative galenic preparation. *Aesthetic Plast Surg*. <https://doi.org/10.1007/s00266-020-01678-2>

Publisher’s Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.