



Correction of nipple areola displacement after gynecomastia surgery using advancement flap

Jinekomasti ameliyatı sonrası gelişen meme başı kompleksi lokalizasyon bozukluğunun ilerletme flebi kullanılarak düzeltilmesi

Firat Ozer, Yalcin Bayram

Gülhane Military Medical Academy, Plastic Surgery, Ankara, Turkey

Dear Editor,

Gynecomastia is the growth of male breast due to proliferation of ductal elements and increase in adipose tissue. Gynecomastia can be asymptomatic or occur as a result of many systemic diseases (1). As the most common illness of male breast, gynecomastia can be one-sided or double-sided. While asymptomatic cases are detected by chance during routine tests, pain and palpable masses are the most common complaints in symptomatic cases (2).

Gynecomastia is treated either by medical or surgical treatment. Medical therapy is usually preferred in the early stages of the case whereas responses to treatment is commonly insufficient. For advanced cases and for those that do not respond to medical treatment, surgery is the standard treatment (3). There are many suggested surgical procedures in the literature for the treatment of gynecomastia. Among the most commonly used techniques are subcutaneous mastectomy, liposuction, and the combination of these two methods (4-8).

After the surgical treatment of gynecomastia, practitioners may encounter complications in 15.5% to 41% of the cases (1). The most common complications hematoma, seroma, epidermolysis, loss of nipple sensation, wound healing, and problems in the acute phase while continuation of complaints, permanent scarring of the surgical field, and palpable mass are some of the complications in later periods (3). Even though all complications are thoroughly defined in the literature, shift of the nipple-areola complex (NAC) from its normal anatomical position to an incorrect position following openings in purse string sutures after periareolar excision or its treatment are not specified in the current literature.

A patient, who had a periareolar subcutaneous mastectomy surgery for gynecomastia fifteen days ago in another centre, was admitted to our clinic with complaints of wound in his right breast and nipple asymmetry. The examination showed that his right NAC was below the level of his left NAC with lateral placement and there were skin defects to the upper medial neighborhood of the NAC due to opening of "purse string" stitches (Figure 1).

Patient was operated under local anaesthesia. We needed to move the NAC, which was located below and to the lateral of its normal anatomic localisation, over to the medial of its current position. The NAC was mobilized and transposed to its normal position with the incisions applied to both lateral edges and upper medial end (Figure 2). By using 3/0 polydioxanone (Doğsan®) sutures, we applied single primary subcutaneous sutures. Thereafter with 4/0 polydioxanone (Doğsan®) sutures, we sutured the incision area with wide, continuous stitches. After the operation, we waited for 10 minutes to observe the viability of the NAC. Having observed no complications, we completed the operation. The patient was discharged after 7 days with surgical recovery (Figure 3).

Received/Başvuru: 04.08.2015

Accepted/Kabul: 31.08.2015

Correspondence/İletişim

Firat Ozer

Gülhane Military Medical Academy,
Plastic Surgery, Ankara, Turkey

E-mail: ozerfirat@yahoo.com

For citing/Atıf için

Ozer F, Bayram Y. Correction of nipple areola displacement after gynecomastia surgery using advancement flap. J Turgut Ozal Med Cent: 2016;23(2):254-6.



Figure 1. The image of the right nipple with lateral placement below its normal anatomic settlement due to opening of purse string stitches around the nipple complex.

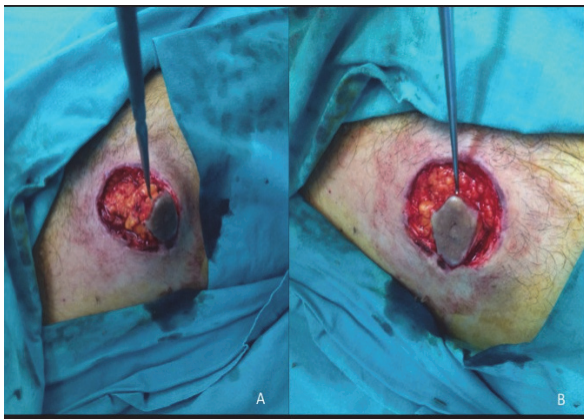


Figure 2. Mobilised flap from the lateral and upper part of the nipple; (A) flap as seen from the side; (B) flap as seen from the back.



Figure 3. The image of the patient on postoperative 6th month.

In the literature, many treatments for the correction of gynecomastia have been described. Today, subcutaneous mastectomy, liposuction, and pull-through techniques are the most preferred surgical methods. These methods can be applied individually or combined. The methods used in fixing gynecomastia and their advantages over one another is currently the most debated issue in the literature on this subject (9, 10). Subcutaneous mastectomy is historically based on two basic processes. Webster technique (5), one of these methods, uses semicircular periareolar inferior incisions while Benelli technique (6) uses periareolar purse string technique.

After the surgical treatment of gynecomastia, complications can arise in 15.5% to 41% of the cases. Revision rate after these surgical procedures is 4.8% (1). The most common complications are hematoma and seroma (in the acute phase), late phase scars and dents on the breast tissue. There are many studies in the literature about these complications. However, in our case, the patient was operated due to skin defects on the medial edge of NAC after the opening of periareolar "purse string" stitches and displacement of NAC.

In case of incorrect placement of NAC, there are two basic treatment options: relocating the nipple to its anatomic location with the help of graft taken and treating the nipple with local flaps. For this patient, we used the local advancement flap in order not to lose the sensation of the nipple. Keeping sensation of the nipple is the most important advantage of flaps over grafts. However, deterioration of nipple blood build up and development of related necrosis are among the major disadvantage of these flaps. Therefore, incisions on the lateral edges should be applied in partial dermal thickness while removing the flap and subdermal plexus should be protected.

Misplacement of the NAC is a complication that may be encountered after the gynecomastia surgeries. Flap advancement in the treatment of these complications may prove to be a practical and easy-to-use treatment option.

REFERENCES

1. Chun- Chang L, Ju- Peng F, Shun- Cheng C, Tim- Mo C, Shyi- Grn C. Surgical treatment of gynecomastia complications and outcomes. *Annals Plast Surg* 2012;69(5):510-5.
2. Bembo SA, Carlson HE. Gynecomastia: its features, and when and how to treat it. *Cleve Clin J Med* 2004;71(6):511-7.
3. Handschin AE, Bietry D, Hüsler R, Banic A, Constantinescu M. Surgical management of gynecomastia- a 10- year analysis. *World J Surg* 2008;323:38-44.
4. Simon BE, Hoffman S, Kahn S. Classification and surgical correction of gynecomastia. *Plast Reconstr Surg* 1973;51:48-56.
5. Webster JP. Mastectomy for gynecomastia through a semi- circular intra- areolar incision. *Ann Surg* 1946;124:7.

6. Benelli L. A new periareolar mammoplasty: the "round block" technique. *Aesthetic Plast Surg* 1990;14:93-100.
7. Park JH, Lee YH. The modified surgical treatment of gynecomastia: pan-cake method. *J Korean Soc Plast Reconstr Surg* 2007;34:628-34.
8. Hammond DC, Arnold JF, Simon AM, Caprora PA. Combined use of ultrasonic liposuction with the pull through technique for the treatment of gynecomastia. *Plast Reconstr Surg* 2003;112:891-5.
9. Scott RS, Matthew JM, Ronald JP. Gynecomastia: Complications of the subcutaneous mastectomy. *The Am Surg* 2002;68(2):210-3.
10. Wong KY, Malata CM. Conventional versus ultrasound-assisted liposuction in gynecomastia surgery: a 13- year review. *J Plast Reconstr Aesthet Surg* 2014;67(7):921-6.