

Experience of Reduction Mammoplasty in Tertiary Level Hospital

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Abstract:

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Breast reduction is a highly efficacious procedure for macromastia with a great amount of patient satisfaction and low rate of complications. In this study reduction mammoplasty was carried out by inferior and superior or superomedial pedicle. In all patients inverted T or wise pattern technique was used. Study Population comprises of 09 patients in whom inferior pedicle was carried out in 05 patients and superior or superomedial pedicle was used in 04 patients. Both Pedicles have their own advantages and disadvantage, although superior of superomedial pedicle is more popular now a days. In this study the complications were minor which were easily dealt with.

Keywords: Reduction mammoplasty, inferior pedicle, superior of superomedial pedicle, macromastia.

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INTRODUCTION

Worldwide this operation has a very high patient acceptance and satisfaction and effectively ameliorates the discomfort and functional problems of large breasts²⁻⁵. The size, shape, and symmetry of a woman's breasts can have a profound effect on her wellbeing, both mental and physical. Many women with excessively small or large breasts have an altered self-image and suffer from poor self-esteem and other psychologic effects.

Chronic headaches as well as breast, neck back, and shoulder pain are common presenting complaints of women with excessively large breasts. These symptoms are either eliminated or markedly improved by reduction mammoplasty. Typically, women who have had reduction mammoplasty are among the happiest patients in the plastic surgeon's practice.

Reduction mammoplasty is certainly one of the operations through which we can significantly contribute to a woman's quality of life¹.

PATIENTS AND METHODS

Study Design:

This study was carried out in the Department of Plastic and Reconstructive Surgery at a Tertiary level hospital. Study population included 09 women. Among the 09 patients 05 underwent inferior pedicle reduction mammoplasty and 04 underwent superior or supero medial reduction mammoplasty. In all cases Wise pattern scar was used. Chief complaints of the patients at admission were neck and shoulder pain and erythema and intertrigo at contact points between breast and thoracic and abdominal skin.

Preoperatively age of the patients, body mass index, numbers of pregnancies were noted. Ultrasonography and mammography were also routinely done to exclude any breast pathology. At the time of operation the amount of breast tissue removed were recorded. Post operative complications were also noted. In the younger patients they were also informed about the possible impact on breast feeding after the operation.

Surgical Procedure:

Among the 09 patients 05 underwent inferior pedicle (IPRM) and 04 underwent superior or superomedial (SPRM) reduction mammoplasty. Skin scar was inverted T or Wise pattern in all patients. All the operations were done under the general anesthesia. Following the preoperative drawings on gigantomastic breasts, the NAC complex was set at 20 cm from the suprasternal notch.

Preoperative markings were made while the patient was standing in the upright position. The inframammary folds were marked on both sides. The tangent was drawn between the two IMFs and it was transposed anteriorly on the breast and the new position of the NAC was determined. The nipple was located 20 cm from the suprasternal notch on the breast meridian. An upright equilateral triangle with 8 cm of each side was drawn downward from this point. The medial extent of the inframammary fold and the center point of the axillary roll as it intersects the anterior axillary line were marked. These points were connected in a curvilinear manner to the lower corners of the previously designed triangle. The dermal component of the pedicle was designed with a width of 8 cm at the base in case of IPRM and centered on the central breast meridian and in case of SPRM 6 cm width of the pedicle was designed. The sum of the lengths of the medial and lateral components of the upper markings without the triangular divergence would approximate the length of inframammary fold marking. For the de-epithelialization of the inferior pedicle, No: 10 scalpel blades were used. The dermoglandular parenchymal pedicle was developed.

The preliminary closure was performed as the two lower triangle points were brought together at the midline inframammary fold. Haemostasis was achieved, and the Romovac drains were placed. Incisions were closed with intradermal sutures.



Figure 1: Pre operative markings for reduction mammoplasty



Figure 2: Before & after reduction mammoplasty



Figure 3: Before & after reduction mammoplasty in oblique view

RESULTS

The age range was 22-54 yrs with a mean value of 42.11 yrs. Among them 01 patient was unmarried having no children but rest all patients were married and having 02 children in 07 patients and 01 patient having 01 child.

Two patients had a body mass index (BMI) between 18.5-24.9. Three patients had a BMI of between 25.0-29.9 and 04 patients had BMI between 30.0-34.9. Any patients having the BMI of >35.0 were asked to reduce their weight and go for surgery.

Ultrasonography and mammography was done routinely in all patients. Only in 01 patient a small cyst was detected in the lower pole which was within the excised part of the breast at the time reduction mammoplasty. In other patients no significant abnormalities were detected.

The amount of tissue resected ranged between 400 gm to 1200 gm with an average of 650 gm.

The complications were wound dehiscence in 02 patients and minor haematoma in 01 patient. None of the patients had necrosis of NAC.

DISCUSSION

It is now widely accepted that the needs of all reduction mammoplasty technique can not be met by any single technique^{6,7}. The objective of the present study is to show the comparative study between the outcomes of inferior pedicle reduction mammoplasty and superior or supero medial reduction mammoplasty. Our experience is that inferior pedicle reduction mammoplasty should be done in patients with large ptotic breasts where distance between clavicle to NAC is much greater than the distance between NAC to IMF. Inferior dermoglandular pedicle is safe and predictable, with very satisfactory results with the patient and the surgeon. It is widely known to be the safest pedicle with excellent blood supply⁸. The breast parenchyma that is preserved in the central and lower breast inevitably descends (from the effect of gravity) after a few months, causing a lengthening of the nipple to inframammary fold distance and leading to what is described as a "bottoming out" of the reduced breast⁹. The requirements for

preservation of the blood supply of the nipple-areolar complex dictate that in some large inferior pedicle reductions there is a limit to the amount of breast tissue that can safely be resected.

But in case of superior or superomedial pedicle large amount of breast tissue can be excised. In this method, the nipple-areola blood supply is from the internal mammary artery perforators as well as the underlying breast parenchyma, now only supplied by the intercostal perforators and the thoracoacromial axis. The reduction is accomplished by removing the lower and central parts of the breast and this eliminates the lower breast parenchyma, which is subject to ptosis in the inferior pedicle reduction.

Additional breast parenchyma may be removed from the lateral aspect of the breast in order to narrow the breast^{10,11}.

Although none of the patients in our series had necrosis of NAC as the blood supply is good in both superior or inferior pedicle if done properly.

Superior or superomedial pedicle reduction mammoplasty has the advantage of improved long-term projection of the breast in comparison to the inferior pedicle. Chances of bottoming out of the breast is more in case of inferior pedicle. One of the benefits of the inverted T procedure is reducing the amount of skin between the bottom of the areola and the inframammary fold. Patients that may benefit from this operation are those with wide, boxy breasts.

CONCLUSION

Selection of pedicle for reduction mammoplasty should be done carefully taking into consideration of many factors including size and shape of the breast, BMI, patient desire. But this operation is always rewarding for the patient and the surgeon as well.

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