An overview for augmentation mastopexy

Essay

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Dedication

I dedicate this work to my father's soul.

بسم الله الرحمن الرحيم

﴿ وَمَا أُوتِيتُمْ مِنَ الْعِلْمِ إِلَّا قَلِيلًا ﴾

صدق الله العظيم

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Abstract

Simultaneous breast augmentation and mastopexy is a common procedure often considered to be one of the most difficult cosmetic breast surgeries. One-stage augmentation mastopexy was initially described more than 50 years ago. The challenge lies in the fact that the surgery has multiple opposing goals: to increasing the volume of a breast, enhance the shape, and simultaneously decrease the skin envelope. Successful outcomes in augmentation can be expected with proper planning, technique, and patient education. This article focuses on common indications for simultaneous augmentation mastopexy, techniques for safe and effective combined procedures, challenges of the procedure, and potential complications.

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F.D.A.	Food and Drug Administration.
g.	Gram.
I.M.F.	Inframammary Fold.
ml.	Milliliter.
N.A.C.	Nipple Areola Complex.

Introduction

The female breast is regarded as a symbol of femininity, and it plays a role in a women's sense of physical and emotional status. Deviations of the normal size, shape and symmetry are interpreted as unattractiveness. Far from the cosmetic problem, such changes disturb both the patient perception of her body and affect the patient self-esteem (Regnault, 1966).

Women having small sized breast are seeking cosmetic surgery for augmentation. Women who have good sized but ptotic breast seek only mastopexy. However a good number of patients may have small size and at the same time ptotic breasts, so they would benefit from both augmentation and mastopexy of the breast. Nowadays there is increase in the number of patients who had massive weight loss after bariatric surgeries. These patients have a small and ptotic breast and they are good candidate too for augmentation mastopexy. Patient evaluation and planning is important, and it is critical to evaluate these patients carefully when planning this procedure. Breast measurements, chest wall contour, breast tissue density, skin laxity, nipple ptosis, and the patient's expectations must be taken in consideration (Cunningham and McCue, 2009).

One of the foremost important steps in achieving excellence in breast augmentation mastopexy is that the preoperative analysis. Such an analysis should determine not only the acceptable implant to attain best results but also the location of the incision, the implant pocket, asymmetries of the breast, chest wall and nipple-areolar complex. The decision of incision placement relies on a range of variables, as well as

patient and surgeon preferences, anatomic considerations, and implant type and size (Tebbetts and Adams, 2005).

A classification system has been recommended by Regnault in 1976 and modified by numerous authors. The foremost commonly used system to classify breast ptosis is as follows:

Grade 1: mild ptosis - nipple just under inframammary fold but still above lower pole of breast

Grade 2: moderate ptosis - nipple further below inframammary fold however still with some lower pole tissue below nipple

Grade 3: severe ptosis - nipple well below inframammary fold and no lower pole tissue below nipple; "snoopy nose" look

Pseudoptosis: inferior pole ptosis with nipple at or above inframammary folds, typically observed in postpartum breast atrophy (Regnault, 1976).

Augmentation alone can be used to correct mild breast ptosis. Proper planning is required when implant placement is used in conjunction with parenchymal modifications. Many types of skin incisions can be used as superior crescent, circumareolar, circumvertical or circumvertical with small inframammary fold extension , full wise pattern, an inframammary fold incision only to improve pseudoptosis, or an inverted T pattern without circumareolar component if the nipple and areola in good position (Loustau et al., 2008).

The goals of breast augmentation is creating an aesthetic breast shape with symmetry of the breast contour and nipple position, upper pole fullness, tightening of redundant skin, and an increase in hypoplastic

breast size, with desirable results and a low rate of complications as breast asymmetry, pseudoptosis, double bubble deformity, capsular contracture or other implant related complication (Tessone et al., 2011).

Patients requiring augmentation with mastopexy are often older than those desiring just enlargement with implants. Such patients may have lost weight, and its related signs of increased tissue laxity, parenchyma loss, striae, and ptosis require a mastopexy to create an aesthetic shape. Plastic surgeons have been doing breast augmentation and mastopexy for decades (Tessone et al., 2011).

Although staging procedures remains the safest choice in certain cases, in many cases these procedures are being performed together, with excellent results and low complication rates, and the debate about which method is better still questionable and have many points of view to be discussed in the review.

Aim of the Work

It is to review important surgical procedures for treatment of hypoplastic ptotic breast, with different modalities of augmentation mastopexy. And we aim to assess outcomes of augmentation mastopexy, complications and its management.

Embryology and Development

The breast originates from the germinal layer of ectoderm which forms the initial breast bud and the connective tissue is derived from the mesoderm. Breast development occurs along the milk line, which extends from the axilla to the groin (figure 1). The normal areola develops during the 20th week of gestation at the level of the fourth intercostal space on the anterolateral chest wall (Whitworth, 1988).

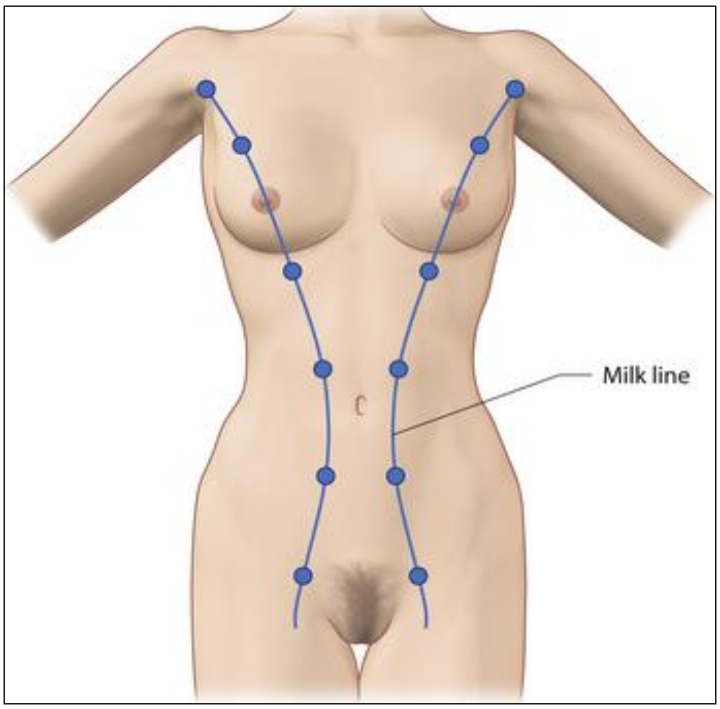

Figure 1: The milk line (Hammond, 2009).

The primary breast bud is formed as a result of growth of germinal layer of the ectoderm leading to development of each breast. By the 10th week of gestation, the primary bud begins to branch, yielding secondary buds by the 12thweek, which eventually develop into the mammary lobules of the adult breast. The primary bud leads to development of 15 to20 secondary buds that develop into lactiferous ducts and their branches. Major lactiferous ducts develop, opening into a shallow