

BREAST SURGERY

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OVERVIEW

The shape and volume of your breasts will change with massive weight loss as a result of bariatric surgery or following diet and exercise. The glandular breast tissue is mixed with fat cells. Weight gain can increase the volume of breast tissue and fat within the skin envelope of the breast. This can increase the cup size and fullness of the breast as well as stretch the skin surrounding this increased volume.

With weight loss, there can be a loss of the fat volume within the breast. This can lead to loss of projection, loosening of the skin surrounding the remaining glandular tissue, and sagging of the breast against the upper abdomen and lower chest.

Decisions on subsequent contouring of the breast will depend upon the amount of remaining volume of the breast tissue and the amount of residual skin, stretched by the initial weight gain.

MASTOPEXY

DESCRIPTION OF PROCEDURE

The mastopexy operation involves removal of the extra skin surrounding the glandular tissue of the breast in a pattern that tightens the skin vertically and horizontally. This often utilizes a "keyhole" pattern of skin removal that leaves a skin closure suture line around the nipple, along the fold below the breast, and an additional vertical incision connecting the bottom of the nipple circle to the fold. Only the outside skin is removed. The glandular tissue, the volume of the breast, is preserved. The incisions are designed to be covered by underclothing and clothes but are visible without clothing.

Compression sports bras are utilized to provide gentle compression. In some large mastopexy operations, drains may be utilized.

AM I A GOOD CANDIDATE FOR MASTOPEXY

Patients who benefit from mastopexy surgery are:

1. Satisfied with their breast volume in their bra and clothing;
2. Stable in their weight loss.

3. Observe sagging in their breasts with the nipple resting lower than the fold of their breasts.

STANDARD PROCEDURE TECHNIQUES

The keyhole pattern of skin removal is the most common surgical approach for the breast lift procedure. It is also referred to as the pattern of Wise in our surgical literature. It leaves the upside down "T" closure along the breast fold.

There are other approaches called the "short scar" mastopexy. These are more suitable for minimal amounts of vertical looseness in the skin. In the massive weight loss patient, the amount of extra skin vertically usually prevents the application of a "short scar" mastopexy.

ADDITIONAL PROCEDURES TO MASTOPEXY

Not all patients may be satisfied with the amount of breast tissue they have after their weight loss. Those who feel they have too much volume may benefit from removal of the breast glandular tissue in a breast reduction operation. Those who feel their volume is too small may want to consider placement of breast implants along with the mastopexy, called an augmentation mastopexy. Both will be discussed subsequently.

Looseness in the tissues in the rib cage, lateral part of the chest, or armpit can be addressed as an upper body lift at the same time as the mastopexy. Whether the incisions can be joined together must be determined by an examination and consultation with a Board Certified Plastic Surgeon.

BENEFITS/ADVANTAGES/OPTIONS

Mastopexy preserves breast volume while adjusting skin coverage and repositioning the location of the breast tissue volume. It can be combined with an abdominoplasty, arm lift, or upper body lift.

OTHER CONSIDERATIONS

Mastopexy should be performed when the patient is close to their goal weight. Since many patients do lose volume with weight loss, performing a mastopexy before achieving goal weight may result in a loss of volume in the breast if further weight loss does occur after the mastopexy surgery.

RISKS / COMPLICATIONS / PATIENT SAFETY

- Numbness along the incision lines (nipple numbness is much less common, but may occur)

- Delayed wound healing along the incision closure.
- Slight asymmetries, depending upon the right and left breast tissue volume.
- Widening of the scar, stretching of the skin envelope, leading to sagging of the breast.

RECOVERY PROCESS

Drains are sometimes used in larger mastopexy operations. You may have them in place until the drainage is less than an ounce in 24 hours. They will be removed in the office.

Sutures are typically removed ten to fourteen days after surgery. Patients are allowed to shower but are instructed to avoid immersing the incisions underwater (such as a bathtub or swimming pool).

Sports bras are used to provide gentle compression and support for the mastopexy. They are used for one to three weeks after the surgery.

Mastopexies, done as the only surgery, are usually outpatient procedures, rarely requiring an overnight stay.

FREQUENTLY ASKED QUESTIONS

How long will the breast lift last? The answer depends upon the volume, weight and cup size of the breast and the bra support utilized by the patient. Large volume breasts, without support of a bra, will stretch the surgically tightened skin envelope out. This will result in a loss of the projection and recurrence of the sagging. Smaller breasts with good supportive bras will maintain their lift and perkiness longer.

Will there be numbness in the nipple? In the mastopexy the nipple is not removed from its attachment to the breast glandular tissue. It should retain its sensation and blood supply. Rarely, a patient may lose some sensation after mastopexy surgery.

What type of anesthesia is used? Mastopexy operations can be performed under a general anesthesia, involving a breathing tube to administer anesthetic gases. It can also be performed under deep intravenous sedation and nerve blocks, avoiding the need for an endotracheal tube. The choice may be directed by your surgeon's preference, cost, or other procedures being performed with the mastopexy.

BREAST REDUCTION (Reduction Mammoplasty)

DESCRIPTION OF PROCEDURE

The keyhole pattern (or pattern of Wise), skin incisions are used to remove not only extra skin, but to remove extra glandular tissue in order to lift the breast and make it smaller. Extra skin vertically makes the breast sag more. Extra skin horizontally makes the breast wider and flatter. The incisions encircle the nipple and pass from the bottom of the nipple to the breast fold underneath and run along the breast fold.

Drainage tubes are used more frequently with breast reduction operations, but not always. Compression and support is provided by a sports bra.

AM I A GOOD CANDIDATE FOR BREAST REDUCTION?

Candidates for breast reduction have:

- Neck or shoulder pain
- Shoulder grooving from bra straps
- Skin irritation under their breasts

Some insurance plans may cover breast reduction surgery. Documentation of these problems by primary care physicians, physical medicine or back specialists, or dermatologists may be required to qualify for insurance coverage.

STANDARD PROCEDURE TECHNIQUES

All breast reduction techniques involve removal of extra skin, extra glandular tissue combined with repositioning of the nipple. The majority of patients have this done with a keyhole skin pattern resulting in the inverted T" closure type.

In very large breasts, the nipple may require repositioning by skin grafting. This will result in loss of nipple sensation, but it may be the only way to reposition the nipple.

Short Scar breast reduction operations are usually not applicable to the massive weight loss patient with large breasts.

ADDITIONAL PROCEDURES TO THE BREAST REDUCTION

An upper body lift can be combined with a breast reduction if there is looseness in skin and fat lateral to the breast under the armpit. Sometimes, the incisions can be blended to form a continuous line extending to the back of the armpit. An arm lift (Brachioplasty) can also be combined with a breast reduction operation.

It is also common to do a breast reduction with an abdominoplasty (tummy tuck).

BENEFITS/ADVANTAGES/OPTIONS

- Improvement in neck and shoulder discomfort.
- Better posture.
- Increased participation in exercise and sports activity.
- Easier to find clothes to fit.
- Possibility of insurance coverage.

OTHER CONSIDERATIONS

Since breast glandular volume changes with weight fluctuation, timing of breast reduction surgery, like mastopexy surgery, should coincide as closely as possible to achievement of goal weight. Breast reduction done before goal weight is attained, followed by weight loss, may lead to loosening of the skin envelope and sagging. It would be better to wait until one achieves their goal weight even if some breast volume is lost. At that point, a smaller reduction or even a mastopexy may be all that is required. Each patient will know the natural progression of their breast volume and shape from before weight loss and during the weight loss experience. This is important information to share with your Board Certified Plastic Surgeon.

RISKS / COMPLICATIONS / PATIENT SAFETY

- Numbness along incision lines or in nipple(s)
- Delayed wound healing, especially at the bottom of the inverted "T"
- Volume and shape asymmetries
- Scar widening or thickening
- Gradual stretching of the skin, leading to sagging

RECOVERY PROCESS

Surgical drains, placed under the breast reduction skin to remove fluid accumulations are usually removed the next day. Sutures are removed about two weeks after the surgery. Patients are allowed to shower the next morning.

Compression and support of the breast reduction incisions is provided by a sports bra. This may be worn two to four weeks after surgery, as determined by your surgeon.

Arm movements may pull against the closure lines. Full extension of the arm above your head may be restricted for two to four weeks.

FREQUENTLY ASKED QUESTIONS

Will I be able to nurse? Because there is removal of breast tissue (and not just skin as in a mastopexy), there is more risk that a woman may not be able to nurse after breast reduction surgery. However, many breast reduction patients have reported the ability to nurse after they have had surgery. Pregnancy will probably increase the volume of the mother's breasts.

Will there be nipple numbness? There is a chance nipple sensation will be different after breast reduction surgery. Again, not every breast reduction patient experiences lost sensation.

What type of anesthesia is utilized? With very large breasts, reduction surgery is usually done under a general anesthetic, with a breathing tube placed in the windpipe. With smaller breast reductions, anesthesia with intravenous sedation and local anesthetic blocks may be an option.

Does insurance pay for breast reduction surgery? Some insurance companies will pay for breast reduction surgery as long as their criteria for the diagnoses of medically significant breast enlargement are met. Some company's guidelines are more stringent than others. You will need to discuss this with your surgeon.

BREAST AUGMENTATION

DESCRIPTION OF PROCEDURE

Breast volume is increased by the placement of saltwater filled (saline) or silicone gel filled implants under the chest tissues to replace volume in the breast lost through weight loss. The location of the incisions is chosen to hide it using local anatomic folds or landmarks.

AM I A GOOD CANDIDATE FOR BREAST AUGMENTATION?

Patients who benefit from breast augmentation have:

- Very little extra skin, allowing their nipple to rest above their breast fold in a standing position.
- Reached a stable point in their weight loss.
- Symmetric breast volume and skin envelopes.

STANDARD PROCEDURE TECHNIQUES

Breast augmentation involves placement of a breast implant filled with saline or silicone gel underneath the breast glandular tissue in a pocket made

surgically. This pocket may be underneath both the muscle and glandular tissue, or it may be above the muscle and under the glandular tissue. The skin incision may be in the breast fold, around the nipple, or in the armpit fold.

The choice of implant type, incision location, or pocket determination will depend on your examination and consultation with a Board Certified Plastic Surgeon.

ADDITIONAL PROCEDURES TO THE BREAST AUGMENTATION

If there is drooping of the skin envelope, a mastopexy procedure may be done at the same time as the augmentation (this will be discussed subsequently).

Other procedures that could be done with breast augmentation include abdominoplasty and arm lift. There are other procedures, like lower body lift, that also could be done at the same time as breast augmentation.

BENEFITS / ADVANTAGES / OPTIONS

Augmentation techniques have been refined for over the past 50 years.

Saline implants allow flexibility in amounts of volume placed for augmentation, but feel slightly firmer.

Silicone gel implants feel softer, but come prefilled at a set volume of gel. They have been re-approved for use in cosmetic breast augmentation.

OTHER CONSIDERATIONS

As with other breast surgery, breast volume and body weight changes must be considered when choosing the timing of the augmentation surgery. The patient should be at or very close to their goal weight, since the implant volume is being chosen to match the existing breast tissue. Any loss of the patient's own breast tissue volume will make the breasts smaller. The only way to add more volume would be to re operate and place larger implants. Patients should be forewarned of the different scenarios relating to weight changes.

Breast implants change the technique used in mammography. Patients should be informed of this before surgery and they should be willing to inform the radiology personnel that they have breast implants before undergoing mammography.

Breast implants are constructed with a silicone shell, or cover, filled with either saline (salt-water) or silicone gel. The outer shell is not indestructible and leaks in the shell can develop. This may require future surgery to

replace an implant with a leak. However, many patients do not develop leaks and do not require replacement for that reason.

RISKS / COMPLICATIONS / PATIENT SAFETY

- Bleeding can occur in the implant pocket. This may require surgery to remove the collection. It does not occur frequently.
- Capsular contracture, or tightening of the pocket containing the implant, can occur. Post operative massage of the pocket may lessen the incidence of this. Placement of the implant below the muscle may also help. Surgery to expand the pocket is the best option to correct this.
- Asymmetry of shape or volume may be present. However, almost all women have some asymmetry between the two sides. Preoperative examination and photographic analysis can help identify these situations before surgery is performed and lead to surgical strategies to minimize their differences.
- Nipple numbness can occur. The sensory nerves to the nipple pass from below the ribs, through the chest muscle and breast gland tissue, to the nipple. Making a pocket below the muscle or above it and below the breast gland can put this nerve at some risk. Again, it does not commonly happen.
- The amount of breast tissue seen by mammography is altered by the presence of a breast implant. Full disclosure of the presence of breast implants prior to mammography is important to prevent damage to the implants.
- Implant deflation from leakage in the outer shell. Salt water leakage is easily absorbed by the body without harm. The patient will notice a loss of volume with leakage in a saline implant. The newest silicone gel is cohesive, meaning that it will not run out through an opening in the shell. It is safer than implants with the older type of silicone (no longer available).

RECOVERY PROCESS

Augmentation mammoplasty is done usually in an out patient setting using either general anesthesia or intravenous sedation and local anesthetic blocks. After observation in the recovery room, patients are discharged to the care of a responsible adult. Gentle compression is administered by a sports bra. No drains are typically used. Arm movements are restricted for 2-3 weeks. Sutures are removed at 2 weeks. Postoperative pocket massage is begun the next day after examination of the patient.

FREQUENTLY ASKED QUESTIONS

How frequently do implants leak? Recent studies by the 2 current implant manufacturers report an approximate risk of implant leakage of 1.7-2.7% per year. In other words 97.3%-98.3% of implants stay intact each year.

Does capsular contracture occur at the same rate if the implant pockets are made below the muscle or above the muscle? Capsular contracture can occur in either the submuscular or subglandular location, but it seems to be less likely in the submuscular position.

Do saline and silicone implants cost the same? Currently silicone gel filled implants are more expensive. While they feel softer than saline implants, their volume is fixed by the manufacturer, giving your surgeon less flexibility in addressing a volume difference in the glandular tissue between the two breasts. Cost is one consideration in the choice of implant type. Your surgeon can advise you after a careful consultation.

AUGMENTATION MASTOPEXY

DESCRIPTION OF PROCEDURE

A breast lift procedure is combined with volume augmentation using a breast implant. The excess skin, allowing the breast to droop and sag, is trimmed in a pattern that repositions the breast glandular tissue and nipple. A pocket is made under the chest tissues for placement of a saline or silicone gel filled implant to add needed volume to the breasts.

The closure results in an incision line around the nipple, in the fold of the breast, and vertically, from the bottom of the nipple to the fold of the breast. A sports bra may be used for compression. A drain may be placed if needed (these are not usually necessary).

AM I A CANDIDATE FOR AN AUGMENTATION MASTOPEXY?

Patients who benefit from an augmentation mastopexy have:

- Less volume than they desire, with their existing breasts supported in a bra
- Looseness and sagging of the breast so that the nipple lies lower than the breast fold
- Reached their goal weight

STANDARD PROCEDURE TECHNIQUES

The keyhole pattern, or pattern of Wise, is used to remove extra skin in both the vertical and horizontal dimensions (see mastopexy section). A pocket is made below the chest tissues for the implants (see Augmentation section). A temporary sizing implant is placed in the pocket. With the additional volume in place, adjustments are made in the skin keyhole pattern. Once the volume has been adjusted, the permanent implant is placed. The mastopexy is completed by trimming the extra skin and closing the wound.

ADDITIONAL PROCEDURES TO AUGMENTATION MASTOPEXY

It may be possible to combine augmentation mastopexy with an abdominoplasty, an arm lift (brachioplasty), or an upper body lift. The specific anatomy and location of the skin redundancy in the arms, upper body, or abdomen will determine whether it is advisable to add any of these procedures to an augmentation mastopexy.

BENEFITS / ADVANTAGES / OPTIONS

- This operation provides the benefit of skin tightening (with the mastopexy) and the benefit of increased breast size (with the augmentation) in the same surgical procedure.
- An option would be to perform the mastopexy first to see the benefits of repositioning the existing breast tissue in higher position before doing an augmentation. If the patient is satisfied with her existing volume, there would not be a subsequent augmentation. If the patient still wants more volume, the breast augmentation could be performed using the previous mastopexy scars.

OTHER CONSIDERATIONS

As with other breast contouring procedures, patients should be as close to their goal weight as possible in order to minimize the risk that they would lose volume with weight loss after having undergone augmentation mastopexy. In that case, further surgery to replace the existing implants with larger ones is the only recourse.

RISKS / COMPLICATIONS / PATIENT SAFETY

- Numbness
- Delayed wound healing
- Widening of the scar
- Asymmetry in shape or volume. Controlling both shape and volume increases in difficulty when doing an augmentation mastopexy. Consultation

with an experienced, Board Certified Plastic Surgeon will help improve your odds of obtaining a symmetric result.

RECOVERY PROCESS

Sports bras are utilized for gentle support and compression. Drains, if utilized, are removed in one to three weeks, when the measured output drops significantly. Pocket massage exercises are initiated one or two days after surgery. Sutures are removed about 2 weeks after surgery. Usually, an augmentation mastopexy operation is performed as an outpatient procedure. If other procedures are added, an overnight stay may be required.

FREQUENTLY ASKED QUESTIONS

How can I maintain my result? Immediately after an augmentation mastopexy the breasts will be full and positioned higher. However, as time passes, gravity will pull on the larger volume and threaten to stretch the newly tightened skin envelope. We can decrease the stretching and settling of the breast with a good supportive bra that will support the increased volume with a fabric under panel.