## **BREAST REDUCTION SURGERY**

Breast reduction surgery is indicated for women with extremely large breasts who suffer from the following symptoms: upper back and shoulder pain, shoulder grooving from bra straps, neck strain with associated tension headaches, and rashes or fungal infections beneath the breast. The surgery is also appropriate in cases of profound psychological discomfort associated with large breast size, especially in younger women and teenagers. Women who need surgery for breast cancer sometimes undergo a breast reduction on the unaffected breast to attain symmetry.

The surgery usually takes up to three hours (1.5 hours per side) and is done using general anesthesia. It typically involves a one-night stay in the hospital, but more and more women now elect to undergo the surgery and be discharged to go home the same day (outpatient surgery). You can discuss this issue with Dr. Pautler at the time of your consultation, as the choice depends on the age of the patient, the amount of tissue to be removed and issues of comfort at home versus the hospital setting.

Before performing the reduction, Dr. Pautler draws a pattern on the breast with the patient in the upright position. During the surgery, breast gland and skin are removed according to this pattern, and the nipple areola complex is repositioned higher on what ends up being a smaller breast mound. Prior to closing all the incisions, Dr. Pautler sits each patient up vertically to allow the breasts to drop and to make sure the breasts are as symmetric as possible. A small drain is inserted into each side, the wounds are sutured closed, and a compressive surgical bra is placed before awakening the patient from anesthesia.

After the surgery, discomfort is controlled with either oral (pills) or intravenous medication. The drains are most often removed the day after surgery, either in the hospital or in Dr. Pautler's office. The compressive bra is worn for about 4-6 weeks, and afterwards most patients can return to normal activities.

## **BEFORE YOUR SURGERY**

Before you undergo breast reduction surgery, Dr. Pautler will ask you to do the following:

- 1. *Bilateral Screening Mammogram*: If you are 35 or older, Dr. Pautler will send you for a mammogram. This is purely a precaution to make sure that there are no suspicious areas in your breast that may need to be followed or biopsied prior to the surgery. If there is a positive finding on the mammogram, Dr. Pautler will most likely have you evaluated by a general surgeon before proceeding with surgery. If you have a very strong family history of breast cancer, Dr. Pautler may send you for a mammogram even if you are younger than 30.
- 2. **STOP SMOKING:** If you are a smoker, Dr. Pautler will strongly urge you to cease as soon as possible. It is important for you to stop smoking at least 8 weeks prior to and 6 weeks after your planned surgery. Cigarettes contain nicotine, a powerful substance that decreases blood circulation especially in the areas that need it the most: surgical wounds. Wound healing is slowed, infections risk is increased, and recovery from surgery may be prolonged.

Chewing gums and patches containing nicotine are just as harmful as cigarettes, so please try not to use them. If you absolutely cannot curb your smoking, Dr. Pautler asks that you be honest about it and let her know because she may need to alter her surgical plan for you.

- 3. *Vitamin C:* This vitamin is helpful for collagen synthesis, which helps boost wound healing. It is available over the counter and is helpful to take two weeks before and two weeks after the surgery.
- 4. Stop taking aspirin, ibuprofen or other non-steroidal anti-inflammatory medications: This category of drugs can increase your risk of bleeding complications, so avoid them. Aleve, Advil, Motrin, Naprosyn, Bufferin, Anacin, Toradol and Alka Seltzer all belong to this group. It is best to run your list of medications by Dr. Pautler to see what you can and cannot take if you are in doubt. TYLENOL is OKAY to take, as are the pain medications that Dr. Pautler will prescribe for you after your surgery. If you are on any blood thinners such as Plavix, Lovenox, or Coumadin, please let Dr. Pautler know as these will need to be stopped as well. Please refrain from taking any Vitamin E or fish oil for six weeks before your surgery!
- 5. *Bras:* You will need to purchase a compressive sports bra for your surgery. It is best to get one that zips or snaps in the front. You will need to bring this to your history and physical appointment and to the hospital.
- 6. **Button down tops:** You may want to gather some tops that are button down because they will be a lot easier to put on and take off as you recover from surgery. Pullovers are cumbersome and can cause discomfort at your wound sites as you raise your arms to get them on and off.
- 7. *Discontinue* the use of birth control pills three weeks before surgery if you are a current smoker or if you have a history of blood clots, high blood pressure, or heart disease. Resume the birth control pills three days after surgery or when ambulating.

## AFTER YOUR SURGERY

After your surgery, there are several things to keep in-mind. They are:

- 1. Refrain from aspirin and ibuprofen, as well as other non-steroidal anti-inflammatory medications and blood thinners until at least two weeks after your surgery.
- 2. *Diet:* No restrictions, you can eat what you like provided you don't have an upset stomach from the anesthesia.
- 3. *Activity:* Definitely refrain from any exercise or strenuous activity for the first two to three weeks after surgery. This includes housecleaning, vacuuming, anything with a lot of arm movement, and brisk walking. It is okay to go out to dinner or a movie, or even a short trip to the store (but don't carry any heavy bags). In general, limit your lifting to no greater than

12 pounds. For those of you with small children, don't carry them. Instead, have someone else put them on your lap and you can hold them. After Dr. Pautler removes your sutures, she will assess your level of wound healing and determine whether or not you can increase your activity level. By six weeks, for most patients, provided your incisions have healed, your restrictions are lifted and exercise can be resumed.

- 4. **Bras:** You will go home from surgery in a support bra which you are to wear day and night for the first two weeks. If you have a compressive type of sports bra that fastens in the front and is seamless, you can switch at that time. Bring this bra to your two-week check-up so that Dr. Pautler can verify that its support is adequate. You should continue to wear your bra daily and nightly until Dr. Pautler tells you otherwise (usually after two weeks or so the bra does not need to be worn at night). In general, compression should be worn for six weeks after the surgery, and thereafter for exercise and other strenuous activity. Going without a bra after six weeks is strongly discouraged and if done should be brief.
- 5. *Smoking:* NO SMOKING FOR AT LEAST 6 WEEKS AFTER SURGERY. Dr. Pautler strongly advises that you stop smoking altogether for your overall health as well.
- 6. *Bathing:* It is okay to shower two days after your drains come out (three days after your surgery). NO BATHS OR SWIMMING until your wounds are healed and approved by Dr. Pautler.
- 7. No vigorous sexual activity until cleared by Dr. Pautler!
- 8. *Scars:* Once your incisions are healed, there are several options you have to try to improve the appearance of your scars. Inexpensive ones include cocoa butter and Vitamin E oil. Mederma is a scar cream that is available over the counter but is a little pricier. Combined with massage, these emollients can help accelerate scar softening, fading, and maturation. Silicone preparations are also available, but are costly, and more suitable for patients that have a known tendency to form poor scars. Bear in mind that the way you heal and the type of scar you form are dependent on your genetic make-up, and despite the best surgical technique and scar management, some patients will have poor scars.

## RISKS

The following is a description of the possible complications that could occur following a breast reduction.

- 1. *Numbness:* There may be some numb areas on your breasts, including the nipple. This may or may not be permanent, but sensation can return in most areas even up to 2-3 years after the surgery. As sensation returns it is not unusual to experience shooting pains, or "pins and needles."
- 2. *Infection:* Unusual, but treated with antibiotics.
- 3. *Asymmetry:* Dr. Pautler will do her best to make your breasts as symmetric as possible. Some asymmetries may appear as the breasts settle. With time, evening-out can occur. If not, a touch up or additional surgery may be necessary if the asymmetry does not correct itself.

- 4. *Scars:* These may be quite pink initially. With time, massage, and use of emollients, they should improve and fade considerably. Although technique is important, scars are a function of the patient more than the surgeon.
- 5. *Tissue Loss:* Rarely, due to some compromise of circulation (which can happen with smoking, diabetes, steroid use, or form a very large resection) to the breast tissue, can there be some tissue loss. Even more rarely could this involve nipple or areola. Some of the non-viable skin or tissue may need to be removed in the office and, with wound care, healing should proceed quickly. The shape and appearance of the breast is usually not affected, but the scar in one area may be a little wide or pinker. In the worst-case scenario, should a nipple be lost (VERY rare), a nipple reconstruction can be done.
  - 6. *Dog ears:* These are little cones of excess skin that can form at the end of the scar that goes under the breast. They usually show up after settling and healing have finished. If bothersome to the patient, they can be removed in the office.
  - 7. **Delayed wound healing:** This means healing that takes longer than two weeks and usually involves the upside down "T" part of the scar under the breast. With a reduction that is closed tightly to firm up the breasts (which is very desirable) and some swelling of the skin, some separation of the incision can occur in the shape of a small triangle under the breast. The area can seep and even bleed a little. This is very common and should not affect the overall result. It is more of an inconvenience, since dressings and ointment need to be applied for a few weeks. If the area of delayed wound healing is very large, Dr. Pautler may perform a scar revision anywhere from 6-12 months after healing.
  - 8. *Changes on mammogram:* With reductions, the breast tissue gets rearranged internally and some scar tissue may show up on a mammogram that was not there before the surgery. When you go for your first post-op mammogram (usually 6-12 months after surgery) tell your radiologist about the surgery. This mammogram will now serve as your new baseline for all subsequent mammograms to be compared to.
  - 9. *Hematoma or seroma:* Rarely does a collection of blood or body fluid become large enough to necessitate aspiration or surgical removal. If so, it needs to be done to prevent infection or wound healing problems. Small collections are watched carefully until they absorb on their own.
  - 10. *Bottoming out:* This can happen in individuals who have very stretchy skin or heavy breast tissue. If it occurs, it does so months after the surgery, and the nipple and areola may appear higher on the breast mound. If necessary, it can be corrected by removing a wedge of skin under the breast.
  - 11. *Fat necrosis:* Some fat in the breast may scar internally and form a lump. With time, these lumps soften, but a rare few can persist. Dr. Pautler can remove the lump through the same incision as the reduction. The lumps are then sent off and analyzed by a pathologist to make sure that all they are, indeed, are fat.
  - 12. *Size unpredictability:* Dr. Pautler will try her best to get you the size that you desire, but it is always possible to be either slightly larger or smaller than desired. Pre-operative communication and looking at pictures is the best way to avoid unhappiness with size.

Initials\_\_\_\_\_

Initials\_\_\_\_\_

- 13. *Breast cancer:* Studies show that a breast reduction can reduce cancer risk by 40% but it cannot eliminate the risk. It has been documented in the literature that on RARE occasions, a cancer has been detected in the breast during the surgery. A pre-operative mammogram is obtained to see if there are any areas that should be studied prior to surgery, but still things can be missed. Should this unusual circumstance arise, it is possible that breast conservation surgery may not be possible and that eventually a mastectomy may need to be performed.
- 14. *Shape change:* The breasts will be quite snug after surgery and will need to be supported to maintain shape. However, gravity cannot be eliminated and despite best efforts to compress with bras and tape, the skin may stretch with time. Usually a flatter upper portion of the breast appears. In patients who have very stretchy skin, Dr. Pautler may perform the breast reduction in such a manner to account for eventual shape change. This means that right after surgery, the breast may have unusually full upper pole. With anticipated settling and stretching of skin, the fullness dissipates and the desired breast shape eventually evolves.
- 15. *Breast feeding:* Many women are able to nurse successfully after this surgery; however, it cannot be guaranteed. If this is something you absolutely wish to do, you may want to consider holding off on the surgery until finished with childbearing.
- 16. *Volume change:* Weight loss or gain, or the use of oral contraceptives can alter your breast size after surgery. Also, it is possible to have re-growth of breast tissue, which can occur with hormone changes. This is unlikely, but possible to have re-growth of breast tissue, which can occur with hormone changes. This is unlikely, but possible, and may necessitate further surgery.