



KATARZYNA MACKENZIE

PLASTIC SURGEON

Breast Reduction

Large breasts may cause a woman to feel self-conscious or make buying clothes difficult, but also their weight can present a physical burden causing neck and back pain together with shoulder soreness because of tight bra straps. Breast reduction surgery aims to make the breasts smaller, more shapely and better supported. Patients post breast reduction are often the most satisfied patient group of all due to the frequent major improvements in both the aesthetic and the physical aspects.

Length of surgery	2-3 hours
Anaesthesia	General anaesthetic
Hospital stay	1 night
Risks/complications of surgery	Frequent: Bruising, swelling, temporary numbness, change in nipple sensation Infrequent: Infection, bleeding (haematoma), delayed wound healing, nipple necrosis, asymmetry, poor scarring
Recovery	5-10 days until socialising with close friends and family 2-3 weeks until return to work and normal social engagements 4-6 weeks until swelling and bruising disappears 6 weeks sports bra day and night. Wired bra after 2 months 4 weeks travel abroad 6-8 weeks until return to gym and other strenuous activities 3-6 months until final result
Driving	2 weeks
Sleeping position	Sleep on your back
Follow up	1 week, 6 weeks, 3 months, 6 months
Duration of results	Long-lasting unless pregnancy and weight gain/loss

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Breast reduction information sheet

Any plastic surgery procedure is a very personal choice and understandably there are a number of questions that arise. This information sheet is a general guide for patients considering breast reduction under the care of Dr Mackenzie. It should provide the answers to some questions that you may have. There are many factors that can affect your individual operation, your recovery and the long-term result. Some of these factors include your overall health, previous breast surgery, chest size and body shape, any bleeding tendencies that you have and your healing capabilities, some of which will be affected by smoking, alcohol and various medications. Such issues that are specific to you need to be discussed with Dr Mackenzie and are not covered here. Please feel free to ask her any further questions before you sign the consent form.

Introduction

Having large, heavy breasts makes many women uncomfortable both physically and psychologically. The excess weight of large breasts may cause back and neck pain, skin irritation, skeletal deformities, numbness in stretched tissues, difficulty finding clothing, unbalance with activities. Many teenaged girls and women are also extremely self conscious about the size of their breasts. The majority of patients that have a breast reduction report a significant improvement in their quality of life. Patients report feeling as if they have more energy, are less tired and have an immediate improvement in their posture.

The breast reduction procedure removes fat, glandular tissue and skin to create smaller, better shaped lifted breasts. It can also reduce the size of the areola, the darker skin surrounding the nipple. The extent of the scars depends on the size and shape of your breasts. Scars are usually placed around the nipple-areola and extend downwards to meet a scar in the inframammary crease.

Breast reduction is one of the most successful and immediately satisfying of aesthetic procedures because it allows patients to enjoy a more active life and greater self-esteem.

What is the goal of breast reduction?

Breast reduction is designed to make the breasts more shapely, better supported and smaller. Other common goals of breast reduction include:

- Improvement of symptoms such as neck and shoulder pain, shoulder grooves
- Maintenance of the ability to lactate
- Overall silhouette will be more balanced and attractive
- Stretched areolas and/or large nipples can be reduced during the same procedure
- Swimsuits, sports bras, and form-fitting clothes will look and feel better

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Who is a good candidate for breast reduction?

Breast reduction is a highly individualized procedure. The following are other common reasons why you may want to consider breast reduction:

- You believe your breasts are too big for your body
- You feel self-conscious wearing a swimsuit or form-fitting or low-cut tops
- You feel that your breast size is not proportional to your figure
- You have breasts that limit your physical activity
- You experience back, neck and shoulder pain caused by the weight of your breasts
- You have shoulder indentations from bra straps
- You have skin irritation beneath the breast crease
- You have poor posture or numbness in parts of your breasts and upper chest from excessive breast weight
- There may also be a marked difference in the size of the breasts (asymmetry), which can be another reason for undergoing the procedure

Breast reduction may be a good option for you if:

- You do not smoke as smoking slows down the healing process and increases the risk of serious complications during and after surgery
- You are physically healthy and you are not pregnant or breastfeeding
- You have realistic expectations
- You are mentally and emotionally stable. Breast reduction requires patience and stability to deal with the healing period
- Your skin has adequate elasticity, so it can resume its former tightness following surgery
- You have finished having children and breast-feeding, because this can have significant and unpredictable effects on the size and shape of your breasts
- Your breasts are fully developed

Are there any reasons for a patient to not have breast reduction?

A history of abnormal mammograms, undiagnosed lumps or other types of masses, severe obesity, diabetes, wound healing disorders, current breast-feeding, smoking, clotting disorders or a family history of them, and heart or circulatory disorders are all contraindications for breast reduction.

Patients who are actively smoking or on blood thinning medication such as aspirin and warfarin are at a high risk of complications such as bleeding or wound infections and delayed wound healing. It is advisable to not consume nicotine in any form for six weeks before the breast reduction and a similar

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time after. Medication such as aspirin or warfarin may need to be stopped (if this is not for an essential or life-threatening condition) at the appropriate time before surgery. This should be discussed with Dr Mackenzie or GP.

What are the limitations of breast reduction?

The outcome of the operation will be partly determined by the shape and size of your breasts and the quality of your skin and tissues before surgery.

- If you have very broad breasts to start with, you are likely to have relatively broad breasts afterwards
- If you have excess fatty fullness round the sides of your breasts, going under your arms, a standard breast reduction may not satisfactorily address this. Additional liposuction may be needed to achieve the best result possible
- Breast reduction invariably will effect nipple sensation. If this is a problem for you, please think twice about having a breast reduction
- Breast reduction surgery always results in scars. If scars on your breasts are a problem for you, you should not have a breast reduction
- Although breast feeding may be possible after a breast reduction, there is a chance that the operation may affect your ability to breast feed. If this is of concern, you may wish to delay your procedure
- Nobody can ever promise a size that will be achieved after surgery

How long should I wait after pregnancy and breastfeeding?

You should wait six months to a year after pregnancy/breast-feeding before considering a breast reduction, as during this time your breasts will be getting smaller (involuting) and there is a danger if you have a breast reduction too soon after a pregnancy, your breasts will end up too small.

What to expect from breast reduction consultation?

You would normally meet Dr Mackenzie for at least two pre-operative consultations. The first of which is mainly about assessment and the formulation of an operative plan specific to your breast. You should then have a cooling-off period before booking surgery and meeting Dr Mackenzie again for a second consultation. Dr Mackenzie usually summarises this consultation in a letter to you and if you decide to move forward towards surgery, a second consultation is scheduled to go over things once more and discuss the possible complications in more detail. It is usual for Dr Mackenzie to write to your GP but often patients do not want this, in which case no communication is made.

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During your breast reduction consultation Dr Mackenzie will discuss:

- Your surgical goals
- Your symptoms
- What outcome do you expect from the surgery? What is your chief motivation in undergoing breast reduction?
- Your complete medical history, breast history, drug allergies
- Your previous breast surgery
- Your current prescription medications, including vitamins, herbal supplements, alcohol, tobacco and drug use. Make sure to tell your doctor about any herbal supplements you take, as some of them may cause bleeding problems

Dr Mackenzie will also:

- Evaluate your general health status and any risk factors
- Ask you to look in a mirror and point out exactly what you would like to see improved
- Examine and measure your breasts, including detailed measurements of their size and shape, asymmetry, skin quality and placement of your nipples and areolas
- Take the photographs
- Discuss your options
- Discuss your expectations with you. An honest discussion will help determine a satisfactory outcome
- Discuss likely outcomes of breast reduction surgery and any potential complications
- Mammogram, blood tests, a heart trace (ECG) and a chest X-ray may need to be organised

Preparation for surgery

It is important to avoid taking any aspirin or products containing aspirin for 2 weeks either side of the operation since aspirin has an adverse effect on bruising as it thins the blood. The same is true for non-steroidal anti-inflammatory drugs (such as Brufen, Nurofen and Voltaren) and vitamin E tablets. You may also be asked to stop taking naturopathic substances such as garlic, ginko, ginseng and St John's Wort as they may affect clotting and anaesthesia. Always tell your surgeon EVERYTHING you are taking.

For procedures lasting longer than 1 hour it is normal practice to stop the contraceptive pill one cycle before the date of surgery. For smaller procedures may not be necessary and you should discuss this with Dr Mackenzie before surgery.

Some patients find homeopathic remedies such as arnica helpful to reduce bruising although it is very difficult to "prove" their efficacy scientifically. If you wish to use arnica you should begin 2-3 days before the operation and continue for a week afterward.

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If you are a smoker it is absolutely imperative that you to stop for 6 weeks before surgery and for 6 weeks afterwards so as not to restrict the circulation to the skin. This restriction applies to all forms of nicotine including patches, inhalers and nicotine chewing gum!

Surgery requiring general anaesthesia is most safely conducted when patients are fit and healthy. General anaesthetic is unwise in patients who are unwell with viral illness or colds.

Baseline mammogram is required before surgery.

On the night before surgery we would ask that you eat well and remain well hydrated. In most cases you will be asked to come to the hospital at 7:00am on the morning of surgery, having had nothing to eat from midnight. Clear water can be drunk up to 2 hours before surgery and tea without milk or coffee without milk can also be taken. Milk is considered to be solid food and cannot be taken within 6 hours of the start of surgery.

On the morning of surgery, you will be admitted to the ward. You will meet the anaesthetist who will discuss the anaesthetic with you in detail and you will also see Dr Mackenzie who will mark the surgical site as required and complete the consent form for surgery with you.

While making preparations, be sure to arrange for someone to drive you home after your surgery and to help you out for a few days at home.

What is involved in the operation?

Breast reduction is a cosmetic procedure carried out under general anaesthesia. It usually requires one night stay in hospital after surgery.

Dr Mackenzie will use the carefully planned markings that she has drawn on your breasts to guide the surgery.

There are many different methods used in breast reduction. In almost all, the nipple is lifted to a higher position, usually remaining attached to the underlying glandular tissue. There will therefore have to be a scar around the nipple areolar disc and a further vertical scar from the lower most point of the nipple to the fold beneath the breast (this is usually 5-6cms in length). In many cases these are the only scars that are required and the operation is called a 'vertical scar mammoplasty'. In larger breasts, or where there is a large amount of thin skin, a further scar is required horizontally in the sub-mammary fold. This is known as an 'inverted T' or 'anchor scar'. The length of the horizontal scar is variable depending upon how much tissue needs to be removed in the flank area.

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In extremely large breasts the nipple areolar is removed completely from the breasts and re-positioned as a free graft. If you undergo this procedure, there will be no sensation in the nipple and you will not be able to breastfeed post operatively.

After removing the excess breast tissue Dr Mackenzie will use carefully placed internal stitches to reshape your breasts (glanduloplasty stitches). Once the breast has been reshaped, the skin and the nipple are stitched in, using absorbable stitches. The wounds are dressed with surgical tapes, which stay on for around 2 weeks following surgery.

If a bra is used, you'll be advised to wear it day and night for the first six weeks except while showering or bathing.

Breast tissue is always submitted to pathology for examination after it has been removed, even if pre-operative mammography and ultrasound are normal.

Drains are rarely used in routine breast reduction by Dr Mackenzie. If drains are used, they will normally come out the day after the operation.

Liposuction can be performed at the same time if you have excess fatty tissue at the sides of your breasts that runs towards your armpit, liposuction is an excellent way to address this.

Where will the incisions be?

These vary according to type of incision. There will be a scar around the nipple areolar disc and a further vertical scar from the lower most point of the nipple to the fold beneath the breast. In larger breasts, or where there is a large amount of thin skin, a further scar is required horizontally in the sub-mammary fold.

Although incision lines are permanent, in most cases they will fade and significantly improve over time.

What can you expect after breast reduction?

It is vitally important that you follow all postoperative instructions provided by Dr Mackenzie. Your surgeon will also provide detailed instructions about the normal symptoms you will experience and any potential signs of complications. It is important to realize that the amount of time it takes for recovery varies greatly among individuals.

You may expect the following immediately after the procedure:

- You will be placed in a support bra to wear day and night for 6 weeks
- You will walk immediately after breast reduction surgery
- Keep wounds dry for 48hours

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- Bruising of the skin of your new breasts may occur and swelling of the breast tissue may cause them to appear larger than anticipated. However, this should improve markedly in three or four weeks and settle in two to three months. To help decrease swelling and bruising, you will be advised to take Arnica for one week prior to surgery and two weeks afterwards
- Some discoloration and swelling will occur initially, but this will disappear quickly. Most residual swelling will resolve within a month
- You will have compression stockings on your legs that will have been fitted prior to surgery - it is vital that you keep these on and continue to wear them for 2 weeks after your operation
- You should refrain from lifting, pulling or pushing anything that causes pain and limit strenuous activity or upper body twisting

Recovery from a breast reduction procedure occurs over a period of six months or more. In the first couple of days, managing pain and avoiding complications is your top priority. After several months, you can start evaluating the aesthetic outcome of your surgery. It is important to remember that the time it takes to recover varies greatly among individuals.

- In the early post-operative period, the breasts will be swollen and it will take at least six months for your final size to be revealed
- Plan to take about two weeks off from work, depending on the physical demands of your job
- Intimate contact will be guided by your comfort
- 6 weeks until return to gym and other strenuous activities
- The initial tapes placed during your surgery should be left undisturbed for the first week, by which time your wound will normally be healed. After this time, it is advisable to apply Micropore tape to the scars for another four to six weeks. This often leads to a better quality scar
- You may notice that you feel less sensation in the nipple and areola areas. This is usually temporary; however, it may take weeks, months or even more than a year before sensation returns to normal
- Many people are able to drive after 2-4 weeks depending on their level of discomfort.
- You will be able to return to sedentary activity (i.e. an office job or light duties) at around 2 weeks
- Light exercise, such as gentle sessions on an exercise bike can be started at 3 to 4 weeks. Starting any earlier than this may result in more swelling to the area around your breasts
- Scars from breast reduction usually take many months, or even a year to settle. In the period immediately following your surgery, these scars may be firm, red, raised, lumpy and itchy due to a build-up of excess scar tissue. As your skin strength returns and the scars mature, they will become softer, flatter and more natural in colour and texture. This process usually takes about 18 months and can be helped by daily massage with moisturizing cream; that can be usually started 3 weeks following surgery

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- Call your surgeon immediately if you notice an increase in swelling, pain, redness, drainage, or bleeding in the surgical area, or if you develop fever, dizziness, nausea, or vomiting. Other red flags include shortness of breath, chest pains, and an unusual heartbeat
- Schedule routine mammograms at the frequency recommended for your age group

How long does the effect of breast reduction last?

Unless you gain or lose a significant amount of weight or become pregnant, your breasts will remain a consistent size. However, gravity and the effects of aging will eventually cause your breasts to loosen and sag over time.

What are the complications of breast reduction?

In general, breast reduction is safe with an associated high degree of patient satisfaction. Nevertheless, no surgery is without risk.

All general anaesthetics carry risks such as deep vein thrombosis and chest infection but with modern anaesthetic techniques, these are minimised.

Early complications

- Bleeding which can lead to a collection of blood (a haematoma) that needs to be drained in theatre. This is likely to be a concern in the first few days after surgery
- Infection- you are given a dose of antibiotics at the beginning of the operation. Further antibiotics are not routinely given, because this leads to antibiotic resistance. The signs of infection are increased redness, discharge from the wound, fevers or feeling unwell. If your wound gets infected, more antibiotics will be required, and sometimes admission to hospital or an operation may be needed to resolve it
- Wound healing problems-this is most common at the T-junction of the scars
- Nipple problems-partial or complete nipple necrosis
- Fat necrosis-present as firm lumps in the breast. They usually settle with time and massage
- Pain- usually not severe and you can manage it by oral pain relief
- Clots in the legs or lungs- to prevent this, you will wear special stockings for 2 weeks after surgery and are encouraged to mobilize

Late complications

- Asymmetry- everyone has a degree of breast asymmetry. Although every effort is taken to achieve the best symmetry possible, there will always be differences between your breasts
- Changes in nipple and breast sensation-an increase or decrease in the feeling in the nipple and/or breast. Can vary in degree and may be temporary or permanent. It may affect sexual response or breastfeeding

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- Seroma-collection of fluid. May cause swelling, pain and bruising. The body may absorb small seromas. Large ones will require a surgical drainage
- Breastfeeding following breast reduction surgery may be possible and if so it is safe. As the breast tissue has been operated on and moved around, there is a chance that you will not be able to breast feed after this surgery. However, you should attempt to breast feed, as it is sometimes possible following a breast reduction
- Poor scarring-occasionally scar revision is required. All incisions produce scars, which usually settle down over several months. However some scars can be troublesome. Hypertrophic scars are red, raised and itchy for several months following the operation. These can be treated but often result in a wide stretched scar. Keloid scars are larger and more difficult to treat but these are extremely rare following breast augmentation

Despite a successful mastopexy, some patients will feel their breasts are not exactly as they were hoping. This may be due to a number of factors, but can be due to unrealistic expectations (for example, some patients are disappointed that they have visible scars, or that they have mild degrees of asymmetry). If further procedures are warranted, there may be further costs involved and this will be explained. Dr Mackenzie will speak frankly to you at your initial consultations to discuss what limitations a breast reduction will have in your specific circumstances. It is crucial that you appreciate what you can expect from a breast reduction prior to undergoing the surgery.