



KATARZYNA MACKENZIE

PLASTIC SURGEON

Brachioplasty

The appearance of loose skin on the upper arm is seen as a stigma of aging. Most patients who have this problem develop this either as a result of ageing or due to significant weight loss. Women will very diligently go to the gym to try and tone their upper arms through exercise but this makes little difference.

Brachioplasty or an arm lift, is a surgical procedure that reduces excess sagging underarm skin and fat, giving smoother contours. It can be combined with liposuction to help with the contours on the arm or in some cases liposuction can be used as an alternative.

Length of surgery	1-2 hours
Anaesthesia	General anaesthetic
Hospital stay	1 night
Risks/complications of surgery	Frequent: Bruising, swelling, temporary numbness Infrequent: Infection, bleeding (haematoma), delayed wound healing, asymmetry, skin necrosis, poor scarring, seroma, nerve injury
Recovery	5-7 days until socialising with close friends and family 1-2 weeks until return to work and normal social engagements 3-4 weeks until swelling and bruising disappears 4 weeks reduced arm movement required 6 weeks until return to gym and other strenuous activities 3 months until final result
Driving	2 weeks
Follow up	1 week, 6 weeks, 3 months, 6 months
Duration of results	Permanent unless followed by weight gain

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Brachioplasty 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 brachioplasty 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 surgery, 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

As we age, the natural elasticity of the skin is lost as the amount of elastin lessens, and the skin and fat of our upper arms begin to sag, creating saggy skin that hangs from the lower side of the arm when the arm is extended. This condition can also occur after substantial weight loss. It can be corrected by removing skin and fatty tissue, however the surgery often leaves a noticeable scar. Smoking also damages the elastin in the skin leading to the appearance of premature ageing.

It leaves a scar that runs on the inside of the arm just above the elbow up to the armpit. As the goal for most patients is to be able to leave the arms bare, some people may not find this a satisfactory trade-off. However, for patients who have lost a significant amount of weight, arm lift surgery can be an important part of restoring a balanced body shape.

The surgery can significantly improve the shape of the upper arm, allowing people to wear short-sleeve or sleeveless clothing without feeling self-conscious. It may help to increase confidence and a better self-image.

What is brachioplasty?

Brachioplasty, or arm lift, is a procedure to tighten and smooth the skin and the underlying supportive tissue that defines the shape of the upper arm whilst reducing localised pockets of fat.

Slack upper arm skin occurs due to aging and/or weight loss and in these circumstances, is hardly ever amenable to correction by exercise.

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Who is a good candidate for brachioplasty?

Brachioplasty is an individualized procedure and may not be suitable for everyone. The following are common reasons why you may want to consider brachioplasty:

- Aging, heredity and weight loss have left you with significant underarm skin laxity
- You are bothered by the appearance of the arms
- Self-consciousness due to the appearance of the arms

Brachioplasty 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
- Your weight is stable. Slender individuals with extra fat and loose skin of the arm are the best candidates; if you are generally obese, this procedure is not appropriate for you
- You are physically healthy. You must be in relatively good physical shape to tolerate this procedure
- You have a positive attitude and realistic expectations

Please note, that brachioplasty is not intended strictly for the removal of excess fat. Liposuction alone can remove excess fat deposits where skin has good elasticity and is able to naturally conform to new body contours. In cases where skin elasticity is poor, a combination of liposuction and arm lift techniques may be recommended.

It is very important to understand that in brachioplasty, the quality of the scar is very important as a measure of the outcome. Quite often patients wear clothing to cover up their arms before surgery because they are self-conscious about the drooping tissue and hence they request corrective surgery. However, if the scars are obvious then they may still want to cover up their upper arms after the operation, so little has been gained.

Are there any reasons for a patient to not have brachioplasty?

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 brachioplasty and a similar 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.

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What are the limitations of brachioplasty?

- Brachioplasty does not treat the forearm
- If this scar is along the arm is an issue for you, then you should not have brachioplasty surgery
- Significant changes in weight can affect the long term results of thigh lift surgery. Therefore, if you are considering brachioplasty surgery after weight loss, it is best to be at a stable weight with no further changes in weight planned before undergoing the surgery

What to expect from brachioplasty 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 upper arms. 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.

During your brachioplasty consultation Dr Mackenzie will discuss:

- Your surgical goals
- What outcome do you expect from the surgery? What is your chief motivation in undergoing brachioplasty?
- Your complete medical and social history, drug allergies
- Your previous upper limb 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 your upper arms and quality of skin
- Evaluate elasticity of the skin
- Discuss the scarring and make sure you understand the amount of scarring to be expected
- Take the photographs
- Discuss your ideal weight, realistic weight and current weight and possibly suggest a weight loss program before surgery
- Discuss your expectations with you. An honest discussion will help determine a satisfactory outcome
- Discuss your options

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- Recommend a course of treatment
- Discuss likely outcomes of brachioplasty and any potential complications
- 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.

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!

For the best results of brachioplasty, it is optimal if you have a body mass index (BMI) as close to normal (25) as possible.

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.

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.

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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.

Are all brachioplasty procedures the same?

There are three different approaches that may be suitable for you depending on your age and specific circumstances. These include:

Liposuction

It can be performed alone which has the advantage of leaving minimal scars and can be very helpful when there is not too much saggy skin. It will not remove skin excess although it can produce some skin contraction. If your skin has poor elasticity, tissue sagging will be even more pronounced after fat is removed.

Limited incision brachioplasty

Liposuction combined with a transverse scar in the armpit which will move upper arm skin in an upward direction. If excess hanging skin is located close to the armpit, Dr Mackenzie may be able to pull up and tuck this excess skin into the armpit. This works best if you have loose, crepe-like skin in the lower inner arm area near the armpit and do not have too much excess fatty tissue.

This will have more effect than liposuction alone in tightening skin but again, the effect is not dramatic. People who have significant sun damage, extensive stretch marks or very loose skin are not candidates for short scar surgery.

Standard brachioplasty

When skin excess is significant (bat wing), whether or not combined with fatty excess, then a procedure which leaves a vertical scar running from the armpit to the elbow is most appropriate. The scar is designed so that when the arm is against the side of the body it should not be visible but it is, nevertheless, an obvious and significant disadvantage of the operation. Excess surface skin is removed but the layers beneath are buried so as to give a firm contour to the arm and avoid unnatural depressions.

Extended brachioplasty

The extended arm lift is similar to a standard brachioplasty, except that the incision is extended along the arm down to the body to include loose skin and fatty tissue that might be just under the arm area along the side of the chest wall. Loose skin in that area is common in patients who have had massive weight loss.

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At your initial consultation, Dr Mackenzie will recommend the exact nature of your proposed treatment, including procedure details, recovery times and any possible side-effects. You should then have a cooling-off period before booking surgery and meeting Dr Mackenzie again for a second consultation. At that second consultation, she will go over the risks and complications in more detail with you. There will also be some more specific points to discuss about the practicalities of the procedure, which are summarised in this document.

What is involved in the operation?

Brachioplasty is carried out under general anaesthesia. It requires one night stay in hospital after surgery.

Dr Mackenzie will create markings on your elbows, arms and armpits. The location, length and direction of these incision markings will be dictated by the type of brachioplasty you will undergo. There are many different surgical treatments for skin and tissue excess of the upper arms. Incision length and pattern during arm lift surgery depend on the amount and location of excess skin to be removed. Incisions are generally placed on the inside of the arm or on the back of the arm and may extend from the underarm (axilla) to just above the elbow. Excess fat may be directly excised or treated with liposuction.

If Dr Mackenzie feels that you have very good quality of skin and the problem is relatively too much fatty tissue present only, then liposuction alone may be useful. This is usually carried out under general anaesthetic and involves one or two tiny incisions. Please refer to the liposuction information sheet.

If there is also skin excess in the upper arms, then some form of excision surgery is required. Normally, this can involve a transverse incision in the axilla (armpit), a longitudinal incision along the back of the upper arm, or a combination of both. The length of the longitudinal incision can vary depending of the exact contour that needs to be corrected, but it can extend as far down as the elbow. Dr Mackenzie would do her best to minimise the appearance of the scar by locating the incision in naturally occurring folds of skin wherever possible. This excision is usually only as deep as the protective layer of the muscles, which is not then damaged.

After the incisions have been made, your surgeon will remove the excess skin and fat and bring the incisions together to provide a firmer and smoother arm contour. Dr Mackenzie will close the incisions carefully to minimize scarring. Your sutures may be placed beneath the skin, where they will be gradually absorbed by your body.

A sterile dressing and a compression garment will be applied and drains may be placed. They will usually exit through a separate tiny incision in the armpit or just below the elbow. If drains are used, they will normally come out the day after the operation. If a large amount of fluid is drained however, then the drains may stay for several days until this amount has reduced to an acceptable level.

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Where will the scars be?

Upper arm lift scars vary depending on the amount of excess tissue you have and the elasticity of your skin. Scars usually fade and soften over a period of one year, however they will never disappear. They can become raised and itchy after surgery. The upper arms are more susceptible to hypertrophic or keloid scars than elsewhere on the body and they may need to be treated with silicone tape or steroid injections. Despite the possibility of problematic scars, the overwhelming majority of patients scar well and are extremely happy with the changes that have been achieved.

Liposuction- liposuction incisions are small; therefore, the scars are also small. Most liposuction scars fade and are barely visible over time.

Limited-incision brachioplasty- scars will most likely be limited to the underarm areas.

Standard brachioplasty-incisions are generally placed on the inside of the arm and may extend from the underarm (axilla) to just above the elbow.

Extended brachioplasty-The standard brachioplasty incision is extended along the arm down to the body to correct loose skin and fatty tissue under the arm area.

What can you expect after brachioplasty?

It is vitally important that you follow all postoperative instructions provided by Dr Mackenzie. Dr Mackenzie 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:

- Immediately following brachioplasty, the skin of your arms will feel very tight
- You should expect to light to moderate bruising. This is quite normal and usually begins to settle in two to three weeks. It should be completely gone in about six weeks. Taking Arnica for a week before your surgery and two weeks afterwards can lessen bruising
- Avoid strenuous activities that involve arm movement, such as raising your arms over your head or lifting
- Although your arms will be sore for several days, you should be up and walking the day after surgery, which is the best way to reduce the chances of blood clotting in the legs
- To minimize swelling, sleep with your arms elevated with pillows for two weeks after the surgery. Arm swelling may take three to five weeks to subside. Keeping your arms elevated, will shorten this period.

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- You can shower in seven days, but in the early stages you should try to keep the dressings dry
- If drainage tubes are placed, they are usually removed after 24 hours and the dressings from the surgery are usually left in place until the first visit to the practice one week following your operation. You must keep them dry
- Mild to moderate discomfort is common and can usually be controlled by taking pain killing tablets such as Paracetamol as required. Stronger painkillers are also prescribed and given on discharge, but they are often necessary only before you go to sleep at night. Aspirin and certain anti-inflammatory medications must be avoided because it can promote bleeding
- You may be wearing an elastic compression garment to reduce swelling and provide support to the skin as it tightens. You will wear this garment for 4-6 weeks day and night

Recovery from brachioplasty occurs over a period of few weeks or more. 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.

- To prevent coughing and bleeding, do not smoke after your procedure. Do not drink alcohol for five days after surgery or while you are taking pain medication
- Occasionally, fluid will continue to collect under the skin (a process called seroma formation). If this occurs the fluid may need to be drained with a needle
- Dissolving stitches are used and therefore their removal is not necessary. Plan to take about one to two weeks off from work, depending on the physical demands of your job
- It is advisable to have help around the house and with young children for the first couple of weeks after surgery
- At the end of two weeks most patients are able to drive, carry light shopping and prepare light meals
- At the end of 6 weeks patients are expected to be able to return to normal lifestyle including gym, sport and aerobics
- Most people are able to return to work which does not involve heavy lifting in approximately one to two weeks after surgery
- Like all surgeries, brachioplasty carries some risk, however they are small and infrequent. To prevent blood clotting problems, you will wear anti-embolism (TED) stockings before, during and after your surgery for 6 weeks and will be encouraged to get up and move about as soon as possible
- Scars from brachioplasty 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

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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

It's important that the surgical incisions are not subjected to excessive force, swelling, abrasion or motion during the time of healing.

How long does the effect of brachioplasty last?

The results of arm lift surgery will be long-lasting, provided that you maintain a stable weight and general fitness. Brachioplasty will not prevent the effects of aging. It is natural to lose some firmness, but most of your improvement should be relatively permanent

If you gain considerable weight after the surgery and then lose the weight, loose skin will return. In either scenario, subsequent arm laxity will be far less significant than before your surgery.

What are the complications of brachioplasty?

In general, brachioplasty is safe and the results are entirely predictable, 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
- Pain- usually not severe and you can manage it by oral pain relief
- Seroma (fluid collection within the wound after the drains have been removed)- it may need to be drained using a little needle
- Swelling and bruising of the upper arms and the inner aspect of the elbows which lasts for a period of a few weeks
- Damage to deeper structures such as nerves, blood vessels and muscles
- Restrictive movement to the tightened skin
- Suture spitting
- Fat necrosis-fat has a poor blood supply may result in a discharge from the surgical wounds or palpable lumps

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Late complications

- Numbness- upper arm will feel numb following the operation and this tends to be permanent
- Visible and prominent scars such as keloids and hypertrophic scars. These scars are raised, red and thickened, and may form over healed incisions. They may be itchy, annoying and unsightly but are not a threat to health. These scars may restrict the clothing you can wear
- Contour irregularities and asymmetry
- Bulge at the elbow just below the operated area resulting in a visible "cut-off" point between the reshaped upper arm and the unoperated forearm
- Sutures may not absorb, but spontaneously surface through the skin, causing irritation, drainage and redness
- Occasionally, there is a need to undertake adjustment or revision surgery at a later date to correct an uneven result or an uneven scar. If needed, this can usually be performed under local anaesthetic as an outpatient procedure
- Lymphoedema- e fluid drainage channels in the arm are disrupted by the surgery and therefore the arm tends to swell to a varying degree
- Disappointment with results

Sometimes after undergoing brachioplasty surgery, patients are disappointed with the result. This may be due to one of the problems described above occurring or due to unrealistic expectations of the surgery e.g. mild asymmetries, visible scarring or less than expected definition of the arm area. It is important that you discuss your expectations in advance of the surgery so that you can understand what to expect from the surgery and so this situation is avoided as much as possible. Additional costs may be incurred for further procedures.