



KATARZYNA MACKENZIE

PLASTIC SURGEON

Abdominoplasty

Abdominoplasty or 'tummy tuck' is a major aesthetic procedure performed to improve the shape and contour of the abdomen. The operation is undertaken to remove excess skin, unwanted scars, stretch marks, fat and can tighten the underlying abdominal wall muscles.

After pregnancy or significant weight loss it is quite common for there to be excess skin in the lower abdomen and muscle separation. Lower back pain and lack of core strength are commonly associated with this.

Abdominoplasty therefore offers improved contouring, core strength, cosmetic appearance and confidence in clothes and is a very positive procedure.

Length of surgery	2-3 hours
Anaesthesia	General anaesthetic
Hospital stay	1-2 nights
Risks/complications of surgery	Frequent: Bruising, swelling, temporary numbness, discomfort on movement/coughing Infrequent: Infection, bleeding (haematoma), delayed wound healing, fat necrosis, asymmetry, poor scarring, seroma, skin or tummy button necrosis
Recovery	5-10 days until socialising with close friends and family 2-3 weeks until return to work and normal social engagements 3-12 weeks until swelling and bruising disappears 6 weeks wearing specialized pressure garment and children lifting 4 weeks travel abroad 12 weeks until return to gym and other strenuous activities 3-6 months until final result
Driving	2-4 weeks
Sleeping position	Sleep on your back with pillow under your knees
Follow up	1 week, 6 weeks, 3 months, 6 months
Duration of results	Permanent unless followed by pregnancy or weight gain

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Abdominoplasty 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 abdominoplasty 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

The skin and muscles of the anterior abdominal wall can be stretched during pregnancy or excessive weight gain. In some people, this leaves loose skin and fat which can cause difficulty with clothing and may look unattractive. Exercise and diet can help to reverse these changes to some extent but in many people, it is difficult to get back to the shape you once had. In these instances, surgery may be helpful to tighten the muscles and remove the excess skin.

It is favoured by patients who have either experienced significant weight loss, often as a result of pregnancy and weight gain/loss factors. Over time, the skin covering the abdominal region loses its natural elasticity as it has been stretched beyond the point that it can naturally recover. The abdominal muscles can also become stretched or separated, further adding to a lack of tone. The important thing to remember about abdominoplasty is that it is not about weight loss; it is about altering the skin and muscles producing a smoother, firmer look and feel. It is important to realise that obese patients often have excessive fatty tissue within the abdominal cavity, which is behind the abdominal muscles. This cannot be removed by a conventional tummy tuck operation.

You will be responsible for adopting or maintaining a healthy lifestyle if you wish the results to remain aesthetically pleasing.

Although the results of a tummy tuck are technically permanent, the positive outcome can be greatly diminished by significant fluctuations in your weight. For this reason, individuals who are planning substantial weight loss or women who may be considering future pregnancies would be advised to postpone a tummy tuck.

Combining the abdominoplasty with liposuction to the waistline can enhance its effectiveness for some patients.

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What is abdominoplasty?

The operation of abdominoplasty, or tummy tuck, is a procedure to tighten slack abdominal skin and improve the abdominal contour. Slack abdominal skin occurs most commonly after pregnancy and/or weight loss and in these circumstances, is hardly ever amenable to correction by exercise, diet, etc.

Who is a good candidate for abdominoplasty?

A tummy tuck is a highly individualized procedure. The following are common reasons why you may want to consider a tummy tuck:

- Aging, heredity, pregnancy, prior surgery or weight fluctuations have left you with extra skin on your abdomen, abdominal muscle weakness
- You are bothered by the appearance of the abdomen
- Sweating, dermatitis and skin infections under the fold of excess skin
- Difficulty participating in sports
- Self-consciousness due to the appearance of the abdomen
- Weakness of the abdominal wall muscles which creates a bulge when straining or lifting

A tummy tuck 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 in the lower tummy 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 are finished having children. The muscles that are repaired during an abdominoplasty can separate again during future pregnancy

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

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 tummy tuck 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 abdominoplasty?

- If you are very slim, you may be able to feel some of the internal stitches underneath your skin
- It is important to realise that obese patients often have excessive fatty tissue within the abdominal cavity, which is behind the abdominal muscles. This cannot be removed by a conventional tummy tuck operation
- The scar of an abdominoplasty is designed to lie low, so it will be hidden behind underwear. However, the scar may not be perfectly even - if this is a problem for you, you may not wish to proceed with surgery
- A tummy tuck cannot correct stretch marks, although these may be removed or somewhat improved if they are located on the areas of excess skin that will be excised
- Internal or external scars from any previous abdominal surgery may also affect your candidacy

What to expect from abdominoplasty 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 abdomen. 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 abdominoplasty consultation Dr Mackenzie will discuss:

- Your surgical goals
- What outcome do you expect from the surgery? What is your chief motivation in undergoing an abdominoplasty?
- Your complete medical and social history, drug allergies
- Your previous abdominal 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
- Discuss your options
- Ask you to look in a mirror and point out exactly what you would like to see improved
- Examine your abdomen and quality of skin and any scars
- Evaluate elasticity of the skin and position of tummy muscles
- Evaluate any evidence of bulges or abdominal wall hernias

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- Take the photographs
- Discuss your ideal weight, realistic weight and current weight and possibly suggest a weight loss program before surgery
- Discuss your plans related to future pregnancies
- Discuss your expectations with you. An honest discussion will help determine a satisfactory outcome
- Recommend a course of treatment
- Discuss likely outcomes of the tummy tuck surgery and any potential complications
- Blood tests, a heart trace (ECG) and a chest X-ray may need to be organised

It may be possible to make slight variation in the placement of scars depending on the type of clothing you favour. However, please remember, the scar cannot follow fashion.

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 a tummy tuck, 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.

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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.

Are all abdominoplasty procedures the same?

There are a variety of different abdominoplasty procedures that may be suitable for you depending on your age and specific circumstances. These include:

Liposuction

Typically, liposuction is suitable for patients without stretch marks who have good-quality elastic skin and whose main problem is an excess of fat. Often patients have what might be termed a 'pot belly' - a slight excess of fat in the lower tummy. Liposuction involves small incisions, through which excess fat is removed. The wounds are then closed and some skin shrinking or tightening can be expected with the use of a compression garment.

Mini Abdominoplasty

A mini-tummy tuck is usually recommended for those who have always been in fairly good shape but cannot achieve their aesthetic goals with diet and exercise, who have a slight excess of skin and fat, especially below the belly-button.

An ellipse of skin and fat is cut from the lower tummy, leaving a horizontal scar similar to that from a caesarean section. Liposuction is performed on the upper tummy and waist, and the muscles below the belly-button are often tightened. The belly-button itself is stretched slightly to become more elongated, and generally more appealing.

Full Abdominoplasty

In patients with a greater degree of slackness, excess skin, excess fat and splaying of the muscles, a classic tummy tuck may be required. An incision is made from hip to hip, and around the belly button. A larger ellipse of skin is excised from above the belly button to just above the pubic hair. Some additional areas may be treated with liposuction and the muscles above and below the belly-button

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are tightened. Although this operation leaves the biggest scar, it provides the greatest degree of improvement in shape.

Extended Abdominoplasty & Lower Body Lift

In cases of extreme weight loss, it may be more appropriate to remove more tissue than is usual in a classic abdominoplasty. If the incision extends around the hip to improve the contour of this area, it is termed an extended abdominoplasty and if the incision involves the complete circumference, then it is termed a lower body lift. These larger procedures can also improve the aesthetics of the buttock and outer thigh areas.

Reverse Abdominoplasty

Instead of having a scar at the bottom of the abdomen, the scar is placed to lie under the breast crease and between the breasts. This operation is usually only performed in particular situations, for example after someone has already had a traditional abdominoplasty but still has a degree of upper abdominal skin and fat excess. Furthermore, it is an operation often performed on people who already have scars under their breasts.

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 below.

What is involved in the operation?

Abdominoplasty is a major operation carried out under general anaesthesia. It requires at least one, and sometimes two nights stay in hospital after surgery. General surgeon may be required for the coexisting hernia repair.

For a full abdominoplasty Dr Mackenzie will make an incision slightly above the pubic area within the bikini line. Having made this incision, the skin and fat of the lower abdomen is lifted away from the underlying muscles to the level of the navel. At this point a second incision is made around the navel, in order to free this from the surrounding tissue. Once this is done, the skin and fat is again lifted off the abdominal muscles to the level of the rib cage leaving the navel on a stalk. The abdominal muscles are then tightened by stitching them together creating a firmer tummy wall and a narrower waist. The skin flap is then stretched down and the extra skin is removed. The tummy button is then reinserted through a new hole in the tummy wall. Finally, the skin is re-draped and sutured over drains. All sutures

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are dissolving and won't have to be removed later. A supportive garment is provided after the operation.

In the mini abdominoplasty technique, a similar incision is made within the bikini line but often a little shorter than the full abdominoplasty. The skin is separated only between the lower incision line within the bikini line and the navel. The navel is left in place without the need for a further scar. This allows the removal of loose skin and excess fat from the lower abdomen as well as tightening of the muscles to improve the waistline. Liposuction may be combined with this procedure if there is fat which needs removal in the upper abdomen or around the waist.

Where will the incisions be?

The incision for a full abdominoplasty usually runs above pubic hair line, from hipbone to hipbone. Dr Mackenzie will determine the shape and length of the incision based on your preferences and the amount of correction you need. You may also have an incision around the navel.

With a mini-tummy tuck, Dr Mackenzie can place the incision as low as possible; it can be hidden in the pubic bone area. The abdominal skin that is removed is below the navel, and there are no incisions around the navel. The length of the mini-tummy tuck incision will vary based on how much skin is removed.

What can you expect after abdominoplasty?

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 an abdominoplasty, the skin of your abdomen will feel very tight. It may, in fact, be difficult to stand up straight for the first few days
- Drainage tubes are usually removed after 24 to 48 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
- 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 will be wearing a wide elastic compression garment to reduce swelling and provide support to the skin as it tightens. You will wear this garment for 6 weeks

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- The first few days after surgery, you should rest quietly. Whilst lying in bed it is advisable to keep the knees bent with two pillows behind them as this reduces the tension and is more comfortable. Likewise, you will need to walk slightly bent forwards once you are up and about and will gradually straighten up over the first few days after surgery

Recovery from a tummy tuck 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. The first week will be the worst, and you will still feel like you are recovering for about two to three weeks. After a few weeks, regaining mobility and fitness becomes important. 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
- It is normal for the sensation to the skin over the lower abdomen to be reduced after a tummy tuck. This is as a result of the surgical lifting of the skin from the underlying muscles thereby reducing some of its nerve supply. You will need to be patient, though, as this process may take months, even years, to complete
- 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
- You should be up and walking the day after surgery, although slowly. It is important to walk to discourage swelling and to prevent blood clots in the legs. However, avoid strenuous exercise for four to six weeks, because it can trigger unnecessary fluid retention in the treated areas
- 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 unless they have had tightening of the abdominal muscles or repair of an abdominal hernia at the same time as the abdominoplasty
- Most people are able to return to work which does not involve heavy lifting in approximately two to three weeks after surgery. It may take up to six weeks for some patients to return to normal work and leisure activities
- Like all surgeries, abdominoplasty 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 abdominoplasty 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

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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

- 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

How long does the effect of abdominoplasty last?

Although the results of a tummy tuck are technically permanent, the positive outcome can be greatly diminished by significant fluctuations in your weight. For this reason, individuals who are planning substantial weight loss or women who may be considering future pregnancies may be advised to postpone a tummy tuck.

Abdominoplasty will not prevent the effects of normal aging. Once the skin is tightened, it will get a little looser as you age.

What are the complications of abdominoplasty?

In general, abdominoplasty 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 with 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
- Fat necrosis (small deposits of fatty tissue that turn hard)
- Clots in the legs or lungs- to prevent this, you will wear special stockings and have an injection of a blood thinner medication into your tummy each night. You will have a little machine to massage your legs for the first few days. For women, it is best to stop oral contraceptive pills for 6 weeks before surgery and use alternative forms of contraception

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- Loss of belly button- It is treated with dressings and rarely may require another operation to re-create a belly button
- Damage to internal abdominal organs

Late complications

- Numbness- tummy will feel numb following the operation and this tends to be permanent
- Suture spitting-sometimes the deep sutures do not dissolve. Dr Mackenzie can remove any sutures that are spitting out of the wound in the clinic
- Contour irregularities and asymmetry. Sometimes certain asymmetries that were present, but less noticeable pre-operatively are revealed after abdominoplasty surgery
- Encysted seroma (fluid collection that feels firm)
- Poor scarring-occasionally scar revision is required
- Delayed wound healing problems
- 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

Some patients will feel their abdomen is not exactly as they were hoping it would be. This may be due to residual fullness in the upper abdomen, for example, or excess tissue around the flanks. The limitations of abdominoplasty mean that it may occasionally be necessary to undergo further procedures in order to improve the surgical result - these further operations will incur a further cost in most situations. Examples of further surgery include: reverse abdominoplasty, liposuction, flank lifts, back lifts and surgery to the mons pubis area. Dr Mackenzie will discuss what limitations an abdominoplasty may have in your specific circumstances. It is crucial that you know what you can (and cannot) expect from an abdominoplasty prior to undergoing surgery.