

Abdominal Reduction

This is also called an abdominoplasty or tummy tuck. In this procedure excess skin and fat can be removed, abdominal contours and scars improved, and the muscles tightened. Different combinations are combined in the various procedures.

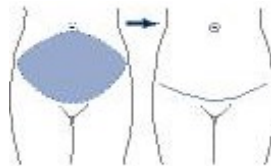
The Standard Abdominoplasty

The excess skin and fat of the abdominal wall between the pubic area and the umbilicus (navel) is removed leaving the umbilicus in place. The skin of the abdominal wall at the level of the umbilicus is then drawn down to suture it to at the pubic level. The patient is left with a long, usually curved scar across the lower part of the abdominal wall at the level of the pubic hair. There is also a scar around the umbilicus. Any looseness of the muscles of the abdominal wall or hernia is repaired at the same time – see Fig.1.

Liposuction may be carried out during this procedure to thin the abdominal wall, or as a separate procedure either before or after the abdominoplasty. In the **mini-abdominoplasty** surplus skin below the umbilicus is removed leaving a low abdominal scar at the level of the pubic hair. The umbilicus is not disturbed but liposuction is usually carried out at the same time as the procedure to reduce the thickness of fat in the abdominal wall and any laxity or hernia of the abdominal wall is repaired at the same time – see Fig.2.

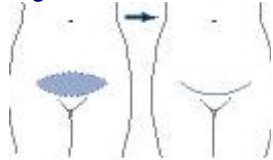
In the **extended abdominoplasty** surplus skin and fat of the loins and back are also removed so that the scar extends around the flanks onto the lower back - see Fig.3.

Fig 1



Standard abdominoplasty

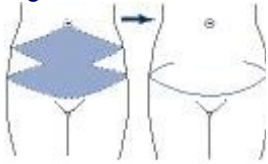
Fig 2



Mini abdominoplasty

For a life more beautiful...

Fig 3



Extended abdominoplasty the scar extends around the flanks onto the lower back.

The **endoscopic abdominoplasty** is used to tighten the muscles of the abdominal wall to give a better contour and is carried out through a short transverse incision above the pubic hair. Skin is not removed but liposuction can be carried out at the same time.

The **apronectomy** is a modification of the mini-abdominoplasty for patients who have a large excess of skin and fat hanging down over the pubic area. In this procedure only the surplus skin and fat is removed. The scar is long and transverse extending from one side of the apron to the other. Modifications to the abdominoplasty skin excision are made when the patient has particular problems associated with scars from previous operations. An alternative procedure which should always be considered instead of many of the above is liposuction on its own. This reduces fat and causes just a little retraction of the skin.

Who is a candidate?

Anyone who has abdominal skin and fat may be a candidate. With women the problem is usually caused by pregnancy, but is greatly aggravated by weight loss. The muscles of the abdominal wall may be weakened by pregnancy and actually pulled apart in the middle (divarification of recti).

Men are similarly affected by weight loss. Stretch marks (striae) are simply the scars which are left after extreme stretching of the skin. They are usually most apparent on the lower part of the abdominal wall. There is no specific treatment for these stretch marks, but many of them are excised in an abdominal reduction and those that are left are tightened making them look less obvious. Patients that are unable to tighten the abdominal wall skin with exercise or wish to achieve a smoother flatter abdomen will also benefit.

What are the consequences?

The patient is left with noticeable scars. The main scar runs transversely across the lower part of the abdomen (see illustrations) and in a standard abdominal reduction there will be a scar around the umbilicus. Other or different scars may be left where the patient has particular individual problems. Some patients make better scars than others and in any case all scars are red initially. It is essential that the patient understands where these scars will be and should discuss them with the surgeon. Although we try and hide them beneath underwear and swim wear fashions can change making previously covered scars visible. There is numbness in the lower part of the abdominal wall after surgery this is usually temporary but could be permanent. Swelling above the scar is usually present due to a collection of tissue fluid which normally drains to the groin. This swelling or oedema settles within a few months.

What are the limitations?

The skin is usually tightened downwards and this does not tighten the waist. If this is desired then one can consider removing skin vertically, but one should bear in mind that vertical scars of the abdomen are less good. The tissue of the abdominal wall is generally fatter than the groin and if liposuction is not carried out a fatty bulge may remain above the scar. The beneficial effects of the operation will last well, however, the effects will be maintained better if the patient keeps exercising the muscles and the weight steady. A further pregnancy will of course stretch the skin again, although probably not to the same degree.

What are the risks?

The standard abdominoplasty is a large procedure requiring two to four days hospitalisation. Drains are removed when they stop draining blood and serum a few days after the procedure. This fluid can reaccumulate after the drains are removed requiring drainage or aspiration. Healing can be slow particularly in the tighter central part of the wound and sometimes dressings are needed for a few weeks. This is more common in patients who are overweight and who smoke. This tends to leave more obvious scars which are tethered - these can be revised. Secondary procedures are sometimes carried out to tidy up the results and will involve scar revision and limited liposuction. Displacement of the umbilicus to one side has been over publicised and is rare. Deep vein thrombosis and pulmonary embolus are rare complications of any operation including this one.

What would you need to do before the operation?

If you are overweight you would be well advised to diet as best results are obtained in people who are the correct weight for their height. If you are taking the contraceptive pill you should stop doing so for six weeks before surgery and use an alternative method in order to reduce the risk of thrombosis. If you smoke there is a greater risk of chest infection and in particular healing of the abdominal wound is less good.

What you should expect at the time of the operation?

You will need to be in hospital for one to three days. When you wake up for your operation it is likely that you will be having a transfusion of salt solution. This is quite normal and is to provide you with fluid you need whilst you are not drinking. You are likely to have drainage tubes coming out of each side of the lower abdomen which are there to drain any collection of blood or serum. You can expect some moderately severe pain for which you will be given pain killing tablets or injections. You will be asked to keep your knees and hips bent to take the strain off your stitches.

Recuperation

Over activity in the early days reduces healing and increases fluid accumulation. Light activities are comfortable in 10 to 20 days. Sports will not be possible for about 6 weeks particularly when the muscles have been strengthened with sutures. A corset is usually helpful to reduce the swelling and improve comfort in the first month.

Body Mass Index

Patients are warned if their body mass index is more than 30, there is evidence to suggest increased risks from the general anaesthesia, deep vein thrombosis/pulmonary embolus and wound healing problems like infection, wound breakdown, nipple areola loss. You are advised to try and lose weight and if you do not, you accept the possible increased risks mentioned.



POST OP INSTRUCTIONS FOR ABDOMINOPLASTY

Average length of stay - 2 nights

Instructions on Discharge

- On the day of discharge the drains will be removed.
- Compression and garment dressings to be worn day and night for 2 weeks and just during the daytime for next 3 months. After 2 weeks wear the panty girdle you have bought.
- TED stockings to be worn for 2 weeks
- All dressings to be kept dry until further instructed
- Discharge with standard painkillers

Dressing clinic

- Appointment approximately 1 week after surgery when the dressing will be lightened
- Usually one or two dressings after this when the wound will still need to be kept dry

Activities

- The first 2 weeks – minimal activities eg walking to the toilet, having meals and washing up
- 3-6 weeks normal daily activities including driving, etc
- 6 weeks onwards – can start sporting activities but no abdominal exercises for 6 months

General scar care for first 3 months

- Micropore tape to the scars - once well healed – for at least three months. The micropore tape is to stay on for showering and baths and simply patted dry and not to be changed until it is very loose and almost falling off by itself. Frequent removal of the micropore tape can irritate the scar.
- Moisturise scar after first 3 months
- Moisturising the rest of the abdominal skin and umbilical scar with active stretching of the umbilical scar to prevent shrinkage of the scar

Special instructions

- Panty-girdle during the day for 3 months. Bikini and other panties are OK for holidays and the odd special occasion

**IF YOU EXPERIENCE ANY PROBLEMS OR HAVE ANY QUERIES FOLLOWING YOUR SURGERY,
PLEASE DO NOT HESITATE TO CONTACT THE WARD**

PRE-OPERATIVE PREPARATIONS

1. We would recommend you start taking Arnica anti-bruising tablets (Holland & Barratt).
2 tablets three times a day 2 weeks before and after surgery.
2. Avoid aspirin, Ibuprofen, Neurofen and other similar painkillers 1 week before surgery and for **two weeks after surgery**. Paracetamol is the safest painkiller to take, if necessary.
3. Stop Vitamin E and its compounds such as evening primrose oil and fish oils, also garlic and garlic capsules, one week before surgery and for **two weeks after surgery**.
4. Preferably, stop the contraceptive pill and HRT 4 weeks before surgery.
5. Shower with Hibiscrub antiseptic liquid soap (provided) the day before and on the morning of your surgery before coming into hospital. If having facial surgery, use the Hibiscrub on the hair as well. **Do not apply moisturiser after showering**
6. Panty Girdle (Cotton, High Waist, Firm Support) – for abdominal procedures, these can be purchased from various stores such as Marks and Spencers or Asda.

Abdominal Exercises

To Begin:

Lie on your back with your knees bent up. Flatten your back slightly so that you can just place your hand under your lower back. Tighten your core muscles by gently contracting your pelvic floor muscles and pulling your tummy button towards your spine. This contraction is very gentle. Hold this position and you are now ready to start the exercises below.



1. Bent Knee Fall out

Gently allow one knee to drop to the side, slowly with control. Ensure the opposite hip doesn't move. Keep your abdominal muscle tight. Now return to the starting position.

Repeat on the other side.

Repeat 5:10



2. Heel dips.

Tighten your tummy muscle. Flex your foot and straighten your leg pushing your heel away from you. Keeping your muscles tight return to the start position.

Repeat on the other side.

Repeat 5-10



3. Dead Bug

This time straighten your right leg as above, at the same time lift your right arm straight above your head. Keeping your muscles tight return to the start position.

Repeat on the other side.

Repeat 5-10



4. Leg Circle

Start with one leg bent and one leg straight. Keeping your tummy tight and your pelvis still slowly circle your straight leg from the hip. The bigger and slower the circle the harder the exercise.

Repeat 5-10 Now repeat on the other side.



5. Crunch

Position as before with your knees bent up, feet on the floor. Place your hands on your thighs. Tighten your tummy muscles and place your chin on your chest. Slowly slide your hands up your thighs lifting your head and shoulders. This should only be a small movement. Return to the starting position.

Repeat 5-10



Exercises after An Abdominoplasty

Now that you have had your operation, you will feel that your stomach feels stiff and uncomfortable when you move. This is normal after surgery.

Initially you will be nursed in a flexed position with your knees bent. As you become more comfortable it is important that you gradually resume an upright posture.

The gentle exercises required will be commenced by your physiotherapist during your first post-operative days.

This is important to maintain good circulation. When you return home it is important to gradually increase your exercise to help improve and function and posture.

Exercises Started in Hospital

Breathing Exercises

1. Deep Breathing Exercises

Take a deep breath in through your nose filling your lungs as fully as possible. Hold for 2 or 3 seconds and then relax the breath out through your mouth.

Repeat 5 times every half an hour.

2. Basal Expansion

Use of incentive spirometer as taught in pre-op clinic/before your operation.

Aim for 5 good breaths every half an hour.

3. Huffing/Coughing

In order to give added comfort to your abdominal wound when coughing, bend your knees up and support your wound with your arm(s). A short forced breath out (huff) puts less stress on your abdomen and may be sufficient to help clear any secretions which may be present in your chest.

Circulatory Exercises

Gentle active upper and lower limb exercises are important to enhance your circulation whilst mobility is limited.

1. Wiggle your toes
2. Pull your feet up towards you and then push them away
3. Gently bend your knees up and down one at a time and then relax

4. Tighten your thigh muscles by pushing your knees down onto the bed. Hold for a count of 3 and then relax
5. Tighten your bottom muscles. Hold for a count of 3 and then relax
6. Bend and straighten your fingers
7. Bend and straighten your elbows

Aim to do all the above at regular intervals throughout the day.

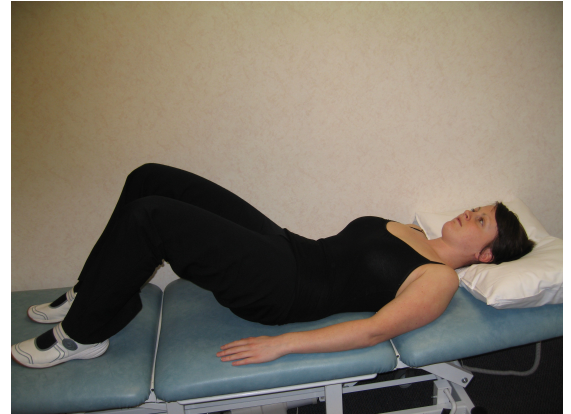
Abdominal Exercises

Day 2

1. Pelvic Tilting

Lying on your back with knees bent and arms by your sides, tighten your stomach muscles pulling your navel down towards your spine and press the small of your back against the bed.

Repeat 10 times.



2. Knee Rolling

Lying on your back with knees together and bent, slowly roll your knees from side to side keeping your upper trunk still.

Repeat 10 times to each side.



Practise above exercises 3 times a day.

Getting In and Out of Bed



Before getting out of bed, bend your knees and brace your abdominal muscles.

Log roll onto your side.

Gently push yourself up into sitting using your arms, allowing your legs to lower off the bed.

Posture

On standing/walking you will feel a tightness across your abdomen which will encourage you to stoop - this is normal. The tightness will gradually ease and by 2 weeks post op you should be upright.

Walking is excellent exercise and is encouraged from week two. While walking try contracting your core muscles at the same time.

Home Exercises

At 6 weeks you may increase your abdominal exercises by adding the first two exercises from your pre-operative exercise sheet.

At 3 months after your operation you will be seen by your consultant. You may now do all of the abdominal exercise from your sheet if you wish.

You may gradually return to normal active exercise but should avoid swimming and abdominal exercises done in a 4-point kneeling position, until 6 months after your operation.

Discharge Advice

On arriving home post-operatively it is perfectly normal to feel very tired. Take things easy and accept/seek help as required.

Lifting

Avoid any heavy lifting and any heavy push/pull action eg hoovering for 6-8 weeks. Always brace your abdominal muscles before lifting.

Scar Care

Advice will be given to you before you leave hospital

Driving

Avoid driving for 4 weeks

Work

You should be able to return to work and gentle exercise by six weeks.

Hobbies

Any other particular hobbies, please ask your physiotherapist/consultant.

Continuing Rehabilitation

You may commence normal abdominal exercise at 3 months.

Pilates is an excellent form of exercise for maintaining abdominal tone.

If you need any further advice about this or any other exercise please contact your physiotherapist.