

# Abdominoplasty (Mini, Standard and Fleur de Lis)

Patient information leaflet

Plastic Surgery

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## What is the goal of abdominoplasty?

An abdominoplasty (tummy tuck) is an operation designed to remove the excess skin and fat from the front of the abdomen, usually below the level of the belly button (umbilicus). In addition, an important part of the operation is tightening of the rectus muscles (“six-pack” muscles) of the abdomen to provide further support and to improve the abdominal wall contour. The aim of the surgery is to improve the appearance and shape of the abdomen. An abdominoplasty may be further enhanced with additional procedures such as liposuction targeted to specific areas. People who have had an abdominoplasty feel more confident about their shape and often comment on how they are able to wear clothes that they would not have even considered previously. Their previous self-consciousness about their abdomen disappears and this is usually reflected by a renewed vigour and energy.

## What should I think about prior to my consultation?

Before seeing Miss Kelemen, you should think about what you are hoping to achieve from an abdominoplasty. Points to consider may include:

- Is my weight steady or am I continuing to lose weight as part of a diet or weight loss programme? If so, it is better to postpone surgery until your weight has plateaued for around 6 months. This is especially important if you have had bariatric surgery (a gastric band or a bypass operation), in which case a longer period of being at a steady weight is recommended (12 months), as well as the involvement of a dietician.
- Why am I thinking of having an abdominoplasty at this time in my life? You should not consider having cosmetic surgery if you are going through any instability in your personal circumstances.
- What clothes would I like to wear after my abdominoplasty and how would they look?
- If you have not finished your family and are considering trying to become pregnant in the near future, an abdominoplasty is best postponed until your family is complete. When is the best time for me to undergo abdominoplasty surgery so that I am able to recover afterwards in the best possible way?
- What are the limitations of abdominoplasty? The outcome of your operation will be partly determined by the shape of your abdomen and the quality of your skin and tissues before surgery.
- If you are very slim and have thin tissues, but an abdominal bulge (typically after multiple pregnancies), there is a chance you may be able to feel some of the internal stitches underneath your skin.

- The scar of an abdominoplasty is designed to lie low, so it will be hidden behind underwear and bikinis in the future. However, the scar may be slightly asymmetrical and may not be perfectly even - if this is a problem for you, you may not wish to proceed with surgery.
- If you have a short frame with very little space between your ribcage and hip bones, the result of an abdominoplasty will not be as good as if you have a larger gap, as there will be less of a possibility of creating a distinct waist.
- We are all asymmetric to a degree - the left and right halves of our bodies are not identical. Following abdominoplasty, certain asymmetries you may not have been aware of prior to surgery may become apparent.
- If you are having surgery having lost a great deal of weight, it may be more appropriate to have an alternative operation such as a belt lipectomy or a lower body lift (surgery, and consequently the scar, go all the way around the body) as an abdominoplasty alone may not be sufficient to address all the areas of redundant tissue. Another option that may be considered is a flankectomy in addition to an abdominoplasty.

## What incision (scar) is used for an abdominoplasty?

- The scar from an abdominoplasty goes from hip to hip, at a level around the upper part of the pubic hairline. It is usually slightly lower in the middle and comes up slightly either side. The scar is always red initially while it matures over several months after surgery before fading. It is at its least obvious from about 2 years onwards but has completed most of its fading after 1 year.
- There is also a scar around your umbilicus (belly button) - this is necessary as the umbilicus is fixed on a stalk deep to your tummy wall. Once the excess skin and fat has been removed and the upper part of your abdominal skin is pulled down, the umbilicus must be re-sited in a new position by bringing it through it through the newly repositioned and tightened skin.
- Occasionally there is a vertical scar in the midline. This is necessary when there is not enough loose tissue between the umbilicus and the pubic hairline to remove all the skin and fat in this area. A small vertical scar low in the abdomen where the umbilicus previously came out through the skin may be needed to get the best result and a safe result.
- Some people have a lot of loose tissue that will not be fully dealt with by simply pulling the abdominal skin down. To get the best result, they need the tissues to be pulled in from the side as well and the excess skin and fat removed from the central abdomen as well. This requires a vertical scar in the midline of the abdomen in the line of the umbilicus. This type of abdominoplasty is known as a **Fleur de Lis abdominoplasty**.

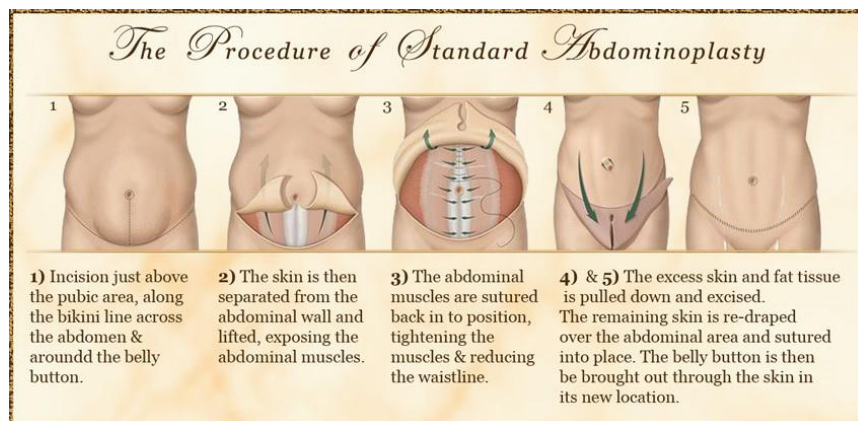
- In some situations, a **mini abdominoplasty** may be performed. In this case, the umbilicus is left alone and a smaller amount of skin between the pubic hair and the umbilicus is removed. Consequently, the umbilicus is lowered after this procedure. A mini abdominoplasty is only appropriate in a small group of people.

## Can liposuction be performed at the same time?

Absolutely. It is particularly useful for improving the abdominal contour at the waist and can improve definition of other areas of the abdomen (such as providing more of a toned and athletic appearance to the middle of the abdomen). As it is an additional procedure, which adds on further time to the surgery, an extra cost is involved.

## What forms of abdominoplasty are there?

### Standard abdominoplasty



A standard abdominoplasty removes the excess skin and fat from the lower abdomen, usually the tissue between the umbilicus (belly button) and the upper pubic hairline. The upper abdominal skin is lifted up and pulled down and the underlying rectus muscles ("6-pack" muscles) are tightened. The umbilicus is repositioned through the new skin that overlies it. The overall effect of this is a flatter, tighter tummy with no loose skin folds at the bottom and significantly less bulging of the tissues. The scar runs from hip to hip across the upper pubic hairline with a small scar around the umbilicus as well. If you have a Caesarean section surgical scar already, this scar will normally be incorporated into the abdominoplasty scar. If you do not have quite enough skin to remove between the lower scar and the umbilicus, a small vertical scar (either arising from the centre of the main scar or sitting between the new belly button and the main scar) may be left, at the site of your previous belly button. If this may be a possibility, Miss Kelemen will discuss it with you during your consultation. A classical abdominoplasty is carried out as usual and liposuction can be performed at the same time. Liposuction is particularly useful for

improving the abdominal contour at the waist. Mons pubis reduction is performed at the same time as the abdominoplasty.



## Mini abdominoplasty

In a mini abdominoplasty, the umbilicus is left alone and a smaller amount of skin and fat between the pubic hair and the umbilicus is removed. Consequently, the umbilicus can be lowered after this procedure, and the main scar can be shorter. Furthermore, there is no scar around the belly button in a mini abdominoplasty. A mini abdominoplasty is only appropriate in selected individuals. It does not allow for tightening of the abdominal muscles and will not improve the appearance of the central and upper abdomen.

## Fleur de Lis abdominoplasty

Some people have a lot of loose tissue that will not be fully dealt with by pulling the abdominal skin down and removing the excess from the lower abdomen. To get the best result, they need the tissues to be pulled in from the sides and the excess skin and fat removed from the central abdomen as well as from the lower abdomen as in a classical abdominoplasty. This requires a vertical scar in the midline of the abdomen in the line of the umbilicus in addition to the lower abdominal scar from hip to hip, and the scar around the umbilicus. This type of abdominoplasty is known as a Fleur de Lis abdominoplasty. The underlying rectus muscles are tightened in the same manner as in a standard abdominoplasty to provide further support and improve the abdominal contour as well.

## What does Miss Kelemen examine for during the consultation?

A female chaperone is always present during your examination. Miss Kelemen will ask you to get undressed down to your underwear, and you will have to lower your underwear to the bottom of your pubic hair area. They will make the following assessments of your abdomen:

- Your general shape and skin quality
- Any asymmetry to your abdomen (this may be more pronounced if you have a degree of curvature of the spine)

- Any previous scars from operations, including Caesarean section scars
- How much loose skin and fat you have - you will usually have to bend forward to allow your tummy to hang out for this part of the examination
- The tone and position of your tummy muscles (rectus abdominis muscles)
- Any evidence of abdominal wall hernia or bulges

## Photography

Pre-operative photographs from a variety of standardised positions are always taken. These can be referred to with you during your consultation to point out various attributes of your abdomen, as well as forming an essential part of your medical records. Your face will not appear in any of the photographs, and your consent for the photographs will be obtained.

## Surgical and post-operative garments

Following abdominoplasty surgery, it is highly recommended that you wear a support garment for as much of the day and night as possible ideally only removing it for showering. This helps to minimise the amount of fluid that may collect in the abdomen (known as a seroma - see below). The garments may be purchased from a number of different suppliers, which Miss Kelemen's team will be able to advise you on. Alternatively, compression underwear, which is sold at a number of high street retailers, may be used. The garments are usually worn for about 6 weeks following surgery. This is particularly important if you have undergone liposuction in addition to your abdominoplasty procedure.

## What happens when I get to hospital?

When you arrive at the hospital you will be shown to your room on the ward and a nurse will go through a detailed questionnaire assessing your health, your allergies and other relevant details (much of which will have been covered before with Miss Kelemen). You will be asked to change into a hospital gown in preparation for surgery. Your anaesthetist will visit you to assess you prior to the planned general anaesthetic.

## Do I see Miss Kelemen before my operation?

You will always see Miss Kelemen before your operation. She will spend some time reviewing everything you have discussed before and make sure you have no unanswered questions or worries. Once you have confirmed you are happy to go ahead, she will ask you to sign a consent form (if you have not already done so in advance). She will then carefully draw important markings on your abdomen in planning for your surgery.



Clinical photographs of your markings for your medical records may also be taken at this time.

## What does the operation involve?

The procedure is performed under a general anaesthetic (with you asleep) usually with a 2-night stay in hospital. You will be asked to arrive at the hospital around 2 hours before your operation and you should be fasting for at least 6 hours before surgery. This means that you cannot eat or drink anything for 6 hours before your operation. You may be allowed to drink water up to 3 hours beforehand. If liposuction is planned, this will be performed prior to the abdominoplasty procedure itself.

- Miss Kelemen's team will place a catheter in your bladder which will be left in place for 24 hours, then will be removed on the ward the next day.
- As outlined above, the abdominoplasty involves making an incision across the bottom of your abdomen and freeing the skin and fat away from the underlying muscle wall, all the way up to the middle of the rib cage.
- The tough tissue that lies on top of the muscles (the fascia) is then carefully stitched in a way that brings the muscles together. Additional fascial stitches may be placed to help further contour the abdomen.
- As much as possible of the excess skin and fat is then removed and a new hole for the belly button is created.
- All the wounds are then carefully stitched up and surgical tapes are placed on the wounds. Special surgical drains may be used to ensure that any fluid produced by the wounds is allowed to drain out – if used, these are usually left in for 24-48 hours.
- You will be put into a supportive surgical garment once the dressings are on.

## How long does the surgery take?

The operation itself takes around 3-4 hours, however, you will be away from your hospital room for longer than this, as additional time is spent on the general anaesthetic, preparation in theatres for your operation and for you to wake up comfortably.

## Will it be painful?

Most patients describe a feeling of being “very tight” and uncomfortable in the initial post-operative period, but this rapidly improves. A feeling of tightness may remain to some degree for 1-2 weeks after surgery. You will be given painkillers to take after the operation, and most people find them helpful to take for around 2 weeks following surgery. If you have had liposuction, there may be a dull ache and bruising in the areas of treatment.

## What else can I expect after surgery?

Normally you will be kept in bed until the morning after surgery, and the bed will be bent in the middle, so your hips are flexed to take the tension off the wound. The next day or the same day you will be helped out of bed, and you will start to get used to making short walks, such as to the bathroom and back. Invariably, you will walk bent over as your abdomen will feel tight - it is important not to try and straighten up as this may put undue tension on the wound. Your posture will improve over the first week or two after surgery as your body adapts to its new shape.

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 6 weeks after your operation. Compression stockings have an important role in minimising the chances of developing blood clots in the legs. You may also have pneumatic calf compression pumps fitted after surgery that will stay on until you get out of bed the next day. You will also receive injections once a day during your hospital stay of blood-thinning medication. Again, this is to reduce the risk of blood clots in your legs while you are less mobile immediately after surgery. You will have to continue to inject the blood-thinning medication at home for further 2 weeks. We shall place a temporary urinary catheter, so you do not have to get out of bed to pass urine (only for 24 hours for example).

During your recovery in hospital, the nurses will ensure that your post-operative garment fits properly, and you are comfortable taking it off and putting it back on by yourself, in preparation for discharge from hospital.

Another point to be aware of is that your abdomen has been tightened significantly, so your tummy will not be able to expand outwards after meals. Therefore, you may feel more bloated than usual after eating, as your stomach will only be able to expand inwards. This may result in you needing to have smaller meals than usual, whilst your body adjusts to its new shape. It is often a good idea to take some mild laxatives for a few days after surgery to soften your stools to prevent further pressure on your abdominal wall.

## When will I leave hospital?

Miss Kelemen will see you later on the day of your surgery and again the following morning (and every day that you are in hospital). She will check your abdomen is soft and not tender, as well as assess the amount of fluid in the drains. If used, normally the drains are removed 48 hours after surgery, and you will go home 2 days following surgery. Some people produce more fluid than others into their drains. If you are producing a lot of fluid, Miss Kelemen may discharge you from hospital with your drains still in, with a plan to take them out in another day or so. Should this be necessary, you will be advised thoroughly on how to look after your drains at home.



## What should I do when I get home?

Once you get home, you need to achieve a balance between resting, but not lying down and doing nothing, as this may increase the risk of certain complications, such as blood clots in the legs (deep venous thrombosis or DVT). You should take short gentle walks and make sure you drink plenty of fluids to further reduce the risks of developing DVTs. Your wounds will have been dressed with surgical tapes, which are shower proof. You should therefore shower every day but ensure the shower hose is not directed towards the main wound (as this may encourage the tapes to come off too early). The easiest thing is to face away from the shower for most of your showering. However, the belly button is a common site of mild inflammation and therefore it is advisable to keep this dressing dry till the first wound check. This will help reduce the risk of infection developing in this area. All wounds/tapes may be dried by gently patting with a clean towel or kitchen towel, or alternatively a hair dryer may be used on a cold setting.

## What about wearing my garment?

Ideally your garment should be worn day and night for the first 6 weeks after surgery. However, everyone is different, and some people vary the length of time they wear it for. It is important that your garment is not too tight - it should be firm but comfortable. As described above, the purpose of the garment is to minimise seroma formation (see below for more information on seroma) and to ensure the swelling to your abdomen resolves as quickly as possible.

## What is the recovery period?

Most people will be able to return to sedentary activity (i.e. an office job or light duties) at 2-3 weeks, depending upon how they feel. Heavier duties, or physical exercise should be postponed for at least 6 weeks after surgery, to allow the abdominal wall to heal properly. It is not uncommon to have small areas of delayed wound healing, often where a dissolvable stitch has not dissolved quite as quickly as it should. These stitches may extrude out of the wound. This can be dealt with easily. If necessary, Miss Kelemen can remove these stitches in the outpatient clinic.

## How long before daily activities may be resumed?

You should avoid all heavy physical activity and contact sports for at least 6 weeks following the surgery. Driving should be avoided for 4 weeks and until you can comfortably brake quickly in the case of an unexpected emergency. Light exercise, such as gentle sessions on an exercise bike can be started at 4 weeks.

## How can I get the best scar possible?

There are a number of strategies that can help scars to mature and soften quickly. The first, and most important of these is regular moisturising and massaging of the scar. This

can usually be started from around 3 weeks following surgery. A non-perfumed moisturising cream should be used, and the scar should be massaged for 5-10 minutes every day. Once the belly button is healed, the scar around it should also be massaged in a similar manner. If the scar feels firm, it is important to be firm with your massage. A number of products are commercially available that help with scarring. The most tried and tested are silicone products. These are available in either sticky-backed gel sheets, scar tapes or alternatively as gels that come in a tube. In order for these products to work properly, they need to be worn on the scar for 24 hours a day, every day for several months, apart from showering.

### Can anything help the swelling and general recovery?

Following an abdominoplasty some people find the sensation in their abdomen uncomfortable. Partly this is due to the retained fluid in the tissues causing some swelling, but it is also due to the nerves regrowing. Nerves regrow from the side of the abdomen towards the centre, in a downwards direction, so the part of the abdominoplasty that remains numb for the longest period is the area just above the pubic hair. Deep tissue massage can be used to help relieve some of the discomfort that may be experienced in this area.

### How soon after the procedure may I have sexual intercourse?

Ideally you should wait until 4 weeks after surgery before having sexual intercourse, in order to minimise the risk of damage to the area of surgery.

## Surgical and recovery timeline

<b>Day of surgery</b>	Review in hospital by Miss Kelemen for surgical planning and surgery itself
<b>Day 1 after surgery</b>	Review in hospital by Miss Kelemen, start to gently mobilise
<b>Day 2</b>	Review in hospital by Miss Kelemen Increase mobility, but still walking bent over, drains removed usually and discharge from hospital
<b>Week 1 after surgery</b>	Hospital appointment for nurse check of your abdomen, you may still be walking bent over at this stage
<b>Week 2-3</b>	Hospital appointment, Tapes on wounds removed - further tapes may be applied  You are able to stand up straight by now
<b>Week 4</b>	Start to moisturise and massage wound if not already doing so (should be continued until scars fade after about 1 year)  Gentle exercise may start (e.g. light programme on exercise bike), may start to drive
<b>Week 6</b>	Hospital appointment, exercise/heavy physical activity may gradually be started  You may stop wearing support garment (although some people continue for a further 6 weeks)
<b>Beyond 6 weeks</b>	Longer term follow-up appointments will be arranged by Miss Kelemen's team to ensure you achieve the best possible outcome

## What you need to know about the possible effects of surgery and potential complications

### Early complications (within the first week of surgery)

#### Bleeding (haematoma)

If there is any suggestion that bleeding into the abdomen has occurred after surgery, you will need to go back to the operating theatre to have the bleeding stopped and the wound washed out to evacuate the collected blood. Signs that a haematoma is developing include: the filling up of your drain bottle with blood, swelling of the abdomen, increasing pain and the development of severe bruising.

#### Infection

Rates of severe infection in abdominoplasty are low. However, as described above, minor wound infections or inflammation may occur. If this happens, it is most common at the umbilicus (belly button) or at the central area of the main scar. Minor wound infections are dealt with using special dressings and antibiotics where appropriate. If a major infection develops, it might be necessary to go back to the operating theatre to wash out the wound. In severe cases, more than one return trip to theatre may be required, as well as the use of a specialised dressing, to try and get the wound to heal as quickly as possible. A severe infection can result in a poor scar as healing of the tissue is affected by the infection.

#### Blood clots

Blood clots in the veins of the legs (DVT - deep venous thrombosis) may occur after abdominoplasty, which is why important preventative measures are taken (calf compression stockings, pneumatic calf pumps and blood thinning injections whilst in hospital). You should continue to wear the calf compression stockings for 2 weeks after discharge from hospital. If a DVT does develop, you will need various investigations and treatment as appropriate. A pulmonary embolus (PE) describes a blood clot that has broken off from the DVT and lodged in the blood vessels in the lungs. This can be serious, and again, appropriate investigations and treatment are instigated should this be suspected after your operation.

#### Damage to internal abdominal organs

Abdominoplasty surgery is carried out on the surface skin, fat and muscle layers of the abdominal wall. Very rarely during abdominoplasty surgery or liposuction, the deeper layers of the wall are breached and in the worst-case scenario the abdominal cavity is entered and internal organs such as the bowel or bladder are at risk of damage. This is extremely rare but is more likely to happen if extensive scarring or a complicated hernia

is present. In the unlikely event that this should happen, Miss Kelemen would immediately take steps to prevent or repair any damage. This may involve antibiotic treatment to prevent infection and involvement of a specialist colleague such as a general surgeon to assess or treat any internal damage.

## Intermediate complications (within 6 weeks of surgery)

### Delayed wound healing

In some people the wounds take longer to heal than in others: this may be due to having had a mild infection of the wound, due to a reaction with the stitches or from “overdoing it” straight after surgery. Normally this is a minor inconvenience, which can be managed with special dressings as an outpatient. Occasionally it can lead to a more severe infection developing as described above. Occasionally the umbilicus or belly button can be very slow to heal as its blood supply can be reduced during the repositioning surgery.

### Suture extrusion

As pointed out above, stitches (sutures) that are designed to dissolve sometimes do not dissolve as quickly as they are meant to. On these occasions, there is a chance that they can work their way out of the wound and appear as sharp prickly filaments, occasionally with a surrounding area of redness on the skin. Should this occur, it is nothing to worry about, and can be dealt with simply in the outpatient clinic. Miss Kelemen can remove any sutures that are extruding of the wound in the clinic, and the wounds should then heal over these areas uneventfully.

### Seroma

Normally the fluid that comes out into the drain bottles stops being produced by the body shortly after surgery. Sometimes, however, the body continues to produce this fluid for some time and the fluid can accumulate in the abdomen, known as a seroma. If this occurs, you may experience discomfort and there is a chance that the fluid can become infected. Therefore, should you develop a seroma, it may be necessary for it to be drained. This involves a fine needle being passed into the abdomen and the fluid sucked out (in a similar manner to how it previously came out into the drain bottle). Miss Kelemen may inject a small dose of steroid into the seroma cavity after aspirating (sucking out) the seroma as this has been shown to reduce the recurrence of the seroma. The aspiration may need to be repeated on more than one occasion depending upon your situation.

### Asymmetry

As described earlier, everyone has a degree of asymmetry between right and left halves of the body. Sometimes certain asymmetries that were present, but less noticeable pre-operatively are revealed after abdominoplasty surgery. It is important to be aware of this possibility prior to undergoing surgery. Regarding the scar, although every effort is taken

to make the scar as symmetrical as possible, the scar is often slightly different each side. This too must be appreciated prior to undergoing surgery.

### Skin loss (necrosis)

Rarely loss of some of the central lower abdominal skin or of the umbilicus skin occurs. If this occurs, it usually due to problems with the blood supply to the skin or infection. Should you be unlucky enough to have this happen to you, it may mean dressings and wound care for a longer than usual period of time or in more severe cases further surgery. This may result in a poorer scar than usual. The risk of this problem is significantly increased in smokers so Miss Kelemen will always advise you to stop smoking at least three months in advance of any planned abdominoplasty surgery and during the recovery period.

### Late complications (after 6 weeks from surgery)

#### Scarring

The abdominoplasty scars will fade, but this can take up to 1 to 2 years. Until then scars are often red and firm. As described above, regular scar massage and moisturising is important to help the scars mature and settle down as quickly as possible. Hypertrophic or keloid scars can occasionally occur – these are thickened and lumpy scars that are more common in people of Asian or Afro-Caribbean descent. Should these occur, Miss Kelemen will discuss with you the best ways of treating them.

#### The sub-optimal result

Despite removing the amount of tissue described above at abdominoplasty surgery, 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. Miss Kelemen will discuss with you at your initial consultations to 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.

### Conclusions

Overall, most patients are delighted with the results of their surgery. They find they can wear clothes that may not have fitted them for years and they can change their style of dress to show off their new shape. People who have had an abdominoplasty say that they generally feel better about themselves and less self-conscious about the shape of their



abdomens. Surgery, however, is a significant undertaking and it is important to have read and considered all the information presented in this information booklet in addition to your consultations with Miss Kelemen prior to embarking on your surgical journey.

Further information

[www.noemikelemen.com](http://www.noemikelemen.com)

***Thank you for taking the time to read this information leaflet.***

***Please sign below to confirm that:***

- I have read and understood the specific information leaflet provided to me by Miss Kelemen.***
- I understand that this specific leaflet is a detailed guide only, providing useful information and is not replacing a thorough consultation outlining my specific needs and circumstances***
- I understand that I will be required to sign additional consent forms during my treatment course***

***I consent and wish to proceed with the abdominoplasty surgery provided by Miss Kelemen.***

***Name: .....***

***Signature:.....***

***Date: .....***

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