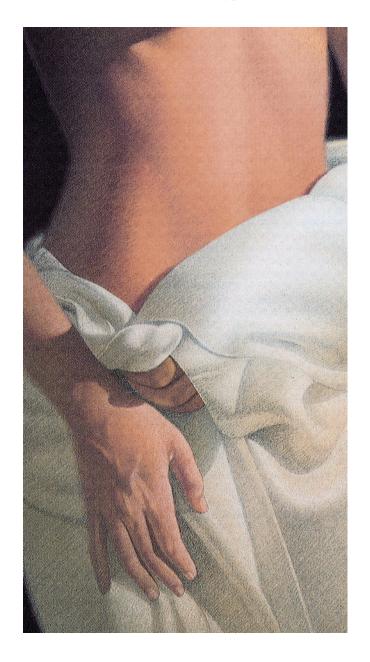
Abdominal Contour Surgery: Abdominoplasty



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Abdominoplasty: General information

Abdominoplasty ("tummy tuck") surgery is very popular, with about 155,000 procedures performed by plastic surgeons in 2012. While women are the "typical" patients undergoing this operation, men may also benefit. The procedure is good for people who have some extra skin and fat of the abdomen. Many women find that pregnancies create stretching of the skin. While much of the weight gained during pregnancy may be lost, the looseness of the stretched skin remains. Abdominoplasty surgery may be ideal for these situations. Women and men who have lost a moderate or significant amount of weight also frequently have loose, stretched skin, and an abdominoplasty may be extremely beneficial for this group. Others just find that they have extra skin, a "pooch" in the lower abdomen, and a "lap" that rests on their lap when they are sitting down. Abdominoplasty surgery works well for them, too.

This booklet is designed to provide you with information about abdominoplasty surgery. It will describe the general technique of the procedure, outline some of the risks involved, and provide information about what to expect after surgery. The booklet is not intended to take the place of a formal consultation with Dr. Kunkel. The consultation is the best way to determine what operation may work best for you. While many people will benefit from this type of surgery, some are not good candidates for the operation. The consultation is the best way to determine this. Dr. Kunkel will spend a lot of time going over the procedure with you. He will probably have you stand in front of a full length mirror and draw on you with a marking pen so you can see where incisions are made, where the scars will be located, and what tissues will be affected by the surgery (the marks are easily removed before you leave the office).

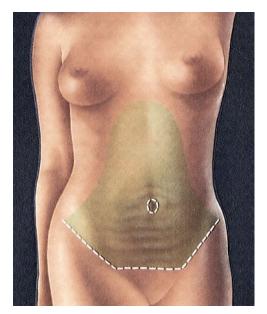
Some people want to have other procedures performed at the same time as an abdominoplasty. For instance, breast augmentation, breast reduction, and liposuction of the thighs and flanks are operations frequently performed at the same time as an abdominoplasty. If you have given consideration to these procedures, the consultation is a good time to learn more about them. On occasion an additional office visit may be necessary to help provide you with a thorough evaluation and discussion about additional procedures.

Our goal with this booklet is to provide you with enough information about abdominoplasty surgery that you will have a thorough understanding of the procedure, and you will be able to make good decisions that work well for you. Please feel free to contact our office at any time if you find that you have additional questions!

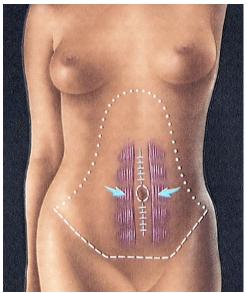
Abdominoplasty: How is it done?

The first step in an abdominoplasty is to identify the areas that bother the patient the most. For some people, the only area that really bothers them is in the central lower abdominal region. For them, a "mini"-abdominoplasty may be all that is needed. For most people, however, there are more areas of involvement. They have excess skin around the umbilicus (belly-button), in the lower central abdomen, and more peripherally around the abdomen. The skin on the outer aspects of the abdomen is loose. For these people, a more full abdominoplasty will probably give the best result.

The pictures below and on the following page represent a "full" abdominoplasty. A "mini"-abdominoplasty has a more limited incision and is used much less frequently. Dr. Kunkel will discuss this with you during your consultation.

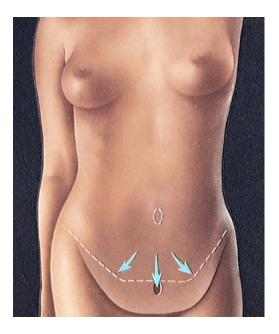


In performing an abdominoplasty, a long incision (represented by the white dotted line) is placed along the lower part of the abdomen. The abdominal skin and fat are then lifted up off of the abdominal muscles. The area that is lifted up is shown by the green color in this drawing. An incision is also made around the umbilicus. The umbilicus itself stays where it is already located. The incision around it allows the surrounding skin and fat to be lifted.



After the skin and fat have been lifted off of the muscles, the muscles are often "tightened" together in the middle of the abdomen. This creates a flattening effect, best seen when viewed from the side. This muscle tightening maneuver may help significantly reduce the central abdominal bulging that bothers a lot of people.

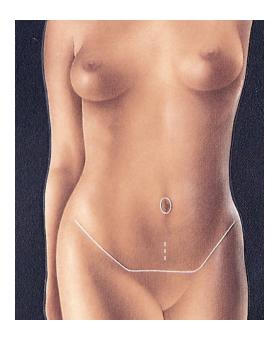
Abdominoplasty: How is it done? (continued)



After the muscle tightening procedure is completed, the excess skin and fat are pulled down and removed. The dotted white lines in this drawing indicate where the incision is made to remove the excess skin.

In many patients, the original location of the umbilicus (shown by the brown circle just beneath the central blue arrow) may be completely removed. In some patients, however, the original site of the umbilicus may not be removed. In those cases, the patient will also end up with a vertical scar in the lower central part of the abdomen.

Dr. Kunkel will discuss this issue with you to help make this clear.



This drawing indicates the locations of the scars after an abdominoplasty. A lower abdominal scar will be present. People with more loose skin extending toward the outer parts of the abdomen will have longer incisions to treat that, resulting in longer scars.

A scar will also be present around the umbilicus, as shown by the white circle.

As mentioned above, some people will also have a lower abdominal vertical scar, indicated by the dotted white line in this drawing. This is more likely in thinner people with less tissue to be removed than in people who have a significant amount of overhanging, redundant skin.

Abdominoplasty: examples "Full" abdominoplasty





This 30 year old woman has had 2 children and wanted her abdomen to look the way it had before pregnancy. She had a lot of loose skin and stretch marks. The improvement with surgery is easy to see.

One of the most effective ways to demonstrate how much tissue was removed at the time of surgery is to take pictures with the patient bending over before and after the operation. In the lower pictures, note how loose her skin was before surgery when she bent over. When she sat down, she had a "lap" sitting on her lap. After surgery, this was no longer the case.





This 31 year old woman has had 3 children, all delivered by cesarean section. She underwent an abdominoplasty. In the lower pictures note the changes that occurred in the profile views.

Abdominoplasty: more examples





This 34 year old woman wanted an improvement in the appearance of her abdomen. On the side view, it is easy to see the change in the "overhang" from before surgery to after the abdominoplasty. A lot of that is accomplished by the muscle tightening performed during the operation.

She also has a small vertical scar in the lower abdomen after surgery.





This 40 year old woman had lost 100 pounds and wanted her abdomen and her breasts to look better. She underwent an abdominoplasty and breast reduction operation. The results are fairly dramatic.

On the side view, note how her abdominal scar extends toward her back. The more tissue there is to be removed, the longer the scar will be.

Mini-abdominoplasty

A woman may have an area of fullness located in the central part of her abdomen that bothers her. Typically there is a relatively small central bulge in the lower abdomen, the skin tone is good (somewhat "snug"), and there may be a little excess fat. In these cases, a "mini" abdominoplasty may work well. With a mini-abdominoplasty, a smaller incision is used in an attempt to limit the scar to the lower central part of the abdomen. The central muscle tightening procedure is performed, which helps reduce the central bulging. Liposuction may be performed on the entire abdomen to help reduce the excess fat. At times, the umbilicus may actually be moved down a little bit, in a procedure described as an "umbilical float". When this procedure is performed, the umbilicus may also end up with a more vertical orientation than before surgery. Dr. Kunkel will discuss this with you if it appears that you are a candidate for this more limited abdominoplasty technique.

Keep in mind that relatively few people are actually good candidates for this procedure. If you have loose skin toward the sides of the abdomen, or if you have skin that hangs over the lower part of the abdomen, a "mini" abdominoplasty probably will not provide the result you desire. The longer the incision that is used, the more areas that may be treated, and often the better the result that is obtained.





This 36 year old woman was scheduled to undergo a hysterectomy, and she noted some fullness in her abdomen that bothered her. She was not bothered much by the slight looseness of her skin toward the sides of her abdomen, and she wanted a procedure to limit the length of her scar. She thought that, while she was under anesthesia for her hysterectomy, she might also undergo a procedure to improve the overall appearance of her abdomen. Immediately after the gynecologist completed the hysterectomy, the patient underwent a "mini"-abdominoplasty.

On the "after" pictures, note the flattened appearance of the abdominal bulge. Also note how the umbilicus has been lowered a small amount, and how it now has a more vertical orientation compared to before surgery.

Abdominoplasty: what to expect after surgery

Length of surgery

An abdominoplasty is a pretty big operation. The surgical procedure typically takes between $2\frac{1}{2}$ and $3\frac{1}{2}$ hours. For a person who is more overweight, or when other procedures are performed at the same operation, it may take longer.

Dr. Kunkel recommends that most people who undergo an abdominoplasty spend the first night in the surgical facility where the procedure is performed. The overnight stay is recommended for a number of reasons. First among these is safety. A patient who spends the first night in the facility is moved out of bed by the nurses on the evening of surgery and early the next morning. The nursing staff helps the patient begin walking early. These maneuvers, as well as a few others discussed below, help reduce the likelihood of deep vein thrombosis (DVT), or blood clots developing in the legs. When a person goes home on the day of surgery, it is less likely that whoever will be taking care of him or her will be aggressive or eager to get the person up out of bed to move around. Additionally, Dr. Kunkel places devices on the patient's feet and legs that intermittently squeeze these areas. These are placed before surgery, then left on during and after surgery and remain in place as long as the patient remains in the surgical facility. These also help reduce the likelihood of DVT. Patients who go home the day of surgery do not receive this advantage. Finally, Dr. Kunkel also typically has the patient receive an injection of a blood thinner before surgery and early the following morning. Patients who go home immediately after surgery do not receive this injection the following morning.

Overnight stay?

One or two drains are frequently placed at the time of surgery. These collect fluid that might otherwise accumulate beneath the skin. The drains may remain for one or two (possibly more) weeks after surgery. The more overweight a person is, the longer she or he will likely have the drains. People may return to work or other activities with the drains in place; the drains just need to be concealed beneath clothing during that time.

Drains

Patients typically feel tired and "worn out" for about 5 days after surgery. It may be difficult to get up and move around without help for a few days. Dr. Kunkel recommends that another adult be available to help with dressings, taking care of the drains, and moving around for a few days after surgery.

Need help at home

People typically walk in a "bent-over" position for 4 to 6 days after surgery. It is helpful to sleep with pillows under the knees and a few extra pillows under the back and head to help remove tension from the surgical site for several nights. When the person feels able, he or she should begin walking more upright.

Body positioning

A person should not drive for a minimum of one week after surgery. Additionally, no swimming is allowed for at least 3 or 4 weeks. The drains need to be removed prior to swimming or getting into a hot tub. No significant stress should be placed on the incisions for 6 to 8 weeks. The person should not jog, play golf or tennis, or go horseback riding during this time. Sexual activities will also place stress on the incisions and should be avoided for 6 weeks.

Activities to avoid

Abdominoplasty: the risks

Abdominoplasty surgery is typically accomplished safely, and patients are typically extremely happy with their results. However, problems may arise, and you should be aware of them. Some of the potential complications are listed below.

Seroma— This is a fluid build up beneath the skin and fat. Fluid may drain through the drains for a prolonged period, or it could build up under the skin after the drains have been removed. While uncommonly a problem for patients, it could require surgery if it occurs.

Wound healing problems— These are more likely in people who have a history of smoking. You should not be smoking and should avoid second hand smoke for a <u>minimum</u> of 6 weeks before surgery. With an abdominoplasty, tension is placed at the incision site (people want tight abdomens). This tension may result in strangulation of some of the blood supply along the scar line, and this could result in an open wound. If that occurs, it may take 4 to 8 weeks to heal, and it could even require surgery.

Deep vein thrombosis— Also known as blood clots. These may develop in a leg and could require hospitalization and anticoagulation for treatment. Clots may move to a lung, and this could be a fatal event. Dr. Kunkel is fairly aggressive in trying to prevent these clots. He frequently prescribes blood thinners to be used around the time of surgery to help minimize the risk of deep vein thrombosis. It is possible that blood thinners could actually cause or increase bleeding, and this could require treatment (including transfusions and/or surgery). Deep vein thrombosis is rare after abdominoplasty, as are problems associated with trying to prevent deep vein thrombosis.

Asymmetry— The scars may be uneven. Often one side of the scar will be longer than the other side. There could be a small "pooch" on one side of the abdomen that is not present on the other.

Problems with the umbilicus— It is possible that the umbilicus could end up a little higher, lower or slightly off to one side than before surgery. The umbilicus may have problems healing well.

Numbness— Your scars will always be numb. The abdominal skin will likely be numb for a few weeks, but sensation typically returns. Infrequently a person may have long-term numbness of the abdominal skin and possibly even the upper thigh skin.

Infection-A possibility with any type of surgery, infection is rare in abdominoplasty surgery. If infection occurs, more surgery may be necessary.

Revision Surgery Policy

While significant problems are not common after an abdominoplasty, they may occur. If you undergo an abdominoplasty by Dr. Kunkel and experience some type of problem that requires additional surgery, Dr. Kunkel will not charge for his services for 12 months after the original operation. However, you will be responsible for the costs of anesthesia, the surgical facility, supplies, and medications that may be required for revision surgery.

Additional procedures performed at the same time as an abdominoplasty

Very commonly a person may undergo additional surgical procedures at the same time as an abdominoplasty. Some of the more common procedures are listed below.

Liposuction— Liposuction of the flanks and thighs may be performed at the same time as an abdominoplasty. Flank (or "love handle") liposuction may enhance the abdominal contour.

Breast surgery— Breast augmentation, breast lift, and breast reduction surgery are fairly commonly performed at the time of an abdominoplasty.

Lower body lift—For people who have lost a significant amount of weight, the outer thighs and the lower back/buttock areas may be sagging significantly. A lower body lift procedure may help improve the appearance of these areas.

Arm "lift" surgery— Also known as a brachioplasty, surgical removal of excess skin and fat of the upper arms may be performed for people who have lost a significant amount of weight.

Inner thigh lift surgery— Also performed for people who have lost a significant amount of weight, removal of the excess inner thigh skin and fat may enhance the overall appearance of this part of the body.

Hysterectomy— Not infrequently a woman may want to have the appearance of her abdomen improved when she undergoes a hysterectomy. These cases are coordinated with the woman's gynecologist. Typically the gynecologist performs the hysterectomy, then Dr. Kunkel performs the abdominoplasty immediately after the gynecologist is finished.

Dr. Kunkel typically tries to limit the total length of surgery to 6 or 7 hours. Procedures that take longer than that may have to be "staged", or performed separately over the course of several months.

Published studies have demonstrated that an abdominoplasty may be safely combined with other surgical procedures. However, increasing the length and severity of surgical procedures may increase some risks, including deep vein thrombosis. While major problems are not common, the person undergoing the abdominoplasty must weigh the potential risks versus the potential gains to make decisions that work well for her or him.

Weight loss patients

People who lose a lot of weight almost always find that their health improves as their weight decreases. Problems with blood pressure and diabetes are often diminished or eliminated, and joint problems in their knees and hips may be improved. However, one of the trade-offs for losing a lot of weight is that frequently a lot of loose skin develops around the abdomen. In these cases, an abdominoplasty may be helpful. Additionally, many people who lose a lot of weight develop loose skin around the thighs, buttocks, and lower back. People with these issues may also consider not just an abdominoplasty but a "lower body lift" procedure or a thigh lift. If you are someone who has lost a lot of weight, either through diet and exercise or through bariatric surgery, you may have questions about these procedures. Be sure to bring them up during your consultation with Dr. Kunkel.

Some people who have lost a lot of weight develop a significant amount of loose skin in the abdomen, and this skin hangs down over the pubic area. Some of these people develop rashes in the area where the skin overhangs the pubic area, and removal of this extra skin may reduce the intensity and/or frequency of these rashes. Removal of this skin alone is called an **abdominal panniculectomy**, and a panniculectomy is a different operation than a cosmetic abdominoplasty. With an abdominal panniculectomy, the overhanging skin and fat are removed, and this results in a long lower abdominal scar. However, the muscle tightening procedure that is usually performed in an abdominoplasty is not a part of a typical panniculectomy. The skin may not be pulled together as tightly in a panniculectomy as in an abdominoplasty.

During an abdominoplasty, the tissues are typically pulled together fairly snugly. However, differences have been noted in the abdominoplasty outcomes between people who have not lost a lot of weight compared to those who have. For people who have lost a lot of weight, there is a **return of some laxity** of the tissues over several months. That is, while the initial results are usually tight, over a few months this group of people will note a little more looseness developing. The results are still quite good, just not as tight as was noted initially. This is not a failure of the operation, but rather a reflection of the extreme changes in tissue dynamics that have occurred as a result of skin being stretched over a number of years related to increased weight, followed by significant weight loss. This creates a setting where tissues lose their elasticity.

If you have lost a lot of weight you may benefit tremendously from an abdominoplasty, abdominal panniculectomy, or lower body lift. Make sure to discuss the areas that bother you most with Dr. Kunkel during your consultation. Obtaining the results you desire requires a lot of communication between you and Dr. Kunkel. Hopefully this booklet has provided a solid "baseline" of information to help you in your decision-making process.

Notes/questions page This page has been left blank so you may take notes and write questions you may have



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