

# PRINTZLAU

PRIVATHOSPITAL

## **Information on tummy tuck surgery (abdominoplasty)**

### **What is a tummy tuck?**

A “tummy tuck” or an abdominoplasty is a cosmetic surgery that removes excess fat and skin from the tummy to flatten the stomach and improve the appearance of the abdomen.

### **Who is a good candidate for tummy tuck surgery?**

[There are four major causes of loose skin on the stomach.](#)

### **Age**

As we age, the skin loses its elasticity. This happens all over the body and may be worsened by external factors such as smoking and sun exposure. How quickly and how much the skin ages primarily depends on hereditary factors.

### **Pregnancy**

During pregnancy, the skin expands across the stomach considerably, while at the same time hormones are released, causing the pelvis and the skin to expand. The hormonal effects will of course disappear after the pregnancy but may have caused rips or tears in the dermis, so-called stretch marks, which prevent the skin from contracting. The older the woman is and the more pregnancies she may have had, the greater the risk that the skin on the stomach continues to be loose.

### **Obesity**

Obesity naturally will also expand the skin. A lot of people with a so-called “apple shape”, are largest in the area exactly around the stomach. Obesity also has a hormonal effect in both men and women. Hormones are metabolized in the fat tissue, which produces an estrogen-like effect. This causes the same risks of reduced elasticity in the skin and stretch marks as during a pregnancy. While overweight, the issue with loose skin will not be visible. However, during intended or age-related weight loss, the skin’s looseness will become visible.

### **Weak abdominal wall**

The abdominal wall consists of the abdominal muscles, both the vertical muscles on each side of the midline, as well as the diagonal abdominal muscles that are wrapped like a corset around the sides of the waist. A well-trained abdominal wall holds the abdominal cavity’s contents in place and gives the impression of a flatter abdomen. Inadequate training has the opposite effect, and a “potbelly” develops, especially while standing. Both pregnancy and overweight cause a separation of the abdominal muscles that may be thinned and loosened. In many cases, the vertical abs drift apart, and a permanent looseness appears which cannot be corrected with training and exercise.

### **Normalizing weight before the operation**

It is important that the amount of fat tissue on the stomach is minimal when undergoing tummy tuck surgery. Fat tissue is very sensitive to reduced blood flow during surgery, which results in considerably increased risk of complications. Further weight loss after the surgery will result in reoccurring looseness of the skin on the stomach.

### **Liposuction in combination with tummy tuck surgery**

It is generally advised against to perform liposuction on the stomach simultaneously with tummy tuck surgery. There is an increased risk of critical affection of the blood supply to

the skin in the overlying areas. In some cases, minor liposuction can be performed in the hip area instead of surgical loosening the skin. However, it is both healthier and cheaper to reduce the amount of abdominal fat with dietary adjustments and a good exercise regimen.

### How is tummy tuck surgery performed?

#### **Mini-tummy tuck**

This surgery merely corrects loose skin below the belly button. This is especially well-suited for women that have a small amount of loose skin on the lowermost part of the stomach that is bothersome as it bulges out over the rise of the pants.

The incision is made very low on the abdomen (a bikini incision) and the skin is loosened up to the level of the belly button. Thereafter, the skin on the most inferior part of the abdomen can be tightened.

#### **Tummy tuck surgery**

Both sagging skin on the stomach and a weakened abdominal wall can be corrected with this surgery. This is the most common surgical option for a tummy tuck, and it is well suited for the cases in which the skin is loose both above and below the belly button, or if there are problems with a weak abdominal wall. The incision is made on the lowest part of the abdomen from hip to hip and around the belly button. The skin is loosened all the way up to the edge of the lower ribs and the abdominal muscles and the skin is tightened. A new opening for the belly button is made.

#### **Extended tummy tuck surgery**

In addition to the previously mentioned complications, the mons pubis (the hair-bearing area immediately above the genitalia) may also appear sagging after major weight loss. To correct this an extended tummy tuck surgery is required in which the upper part of the

mons pubis is removed, and the rest is lifted. A large weight loss will also leave loose skin on the thighs. In this regard, it is beneficial to use a technique in which a strong subcutaneous fascia is lifted and attached to the abdominal wall (SFS, Superficial Fascial Suspension)

## Tummy tuck surgery – from first consultation to follow-up

### **First consultation**

During the consultation, the plastic surgeon will assess with you what your wishes are with respects to possibilities and limits. If you are a good candidate for tummy tuck surgery, the plastic surgeon and you will determine what type of surgery is best suited for you. You will be informed about what result is realistic to expect after the surgery, and what risks the surgery may entail.

The plastic surgeon will evaluate your general health and whether it is necessary to do blood tests or other analysis and examination before the surgery can be carried out. You will be photographed for a “before” photo, if the operation is carried out.

As a private patient you are advised to have someone accompany you during your consultation. This gives you a good opportunity to discuss pros and cons in regards to your wishes for the surgery also when you have returned home. Danish legislation on cosmetic treatment also constitutes that one week must pass after the consultation before you can book an appointment for the surgery. This is for your protection so that no cosmetic surgery is performed impulsively.

Publicly outsourced patients are not bound by this legislation but are recommended to follow the same precautions.

### **The surgery**

Tummy tuck surgery is performed under hospitalization and in full anesthesia. Mini-tummy tuck surgery can be done under local anesthesia, but it is recommended to

perform it under full anesthesia.

For this reason, you are to be fasting for at least 6 hours prior to surgery, but you can drink water up until 2 hours before the surgery.

When you arrive at the hospital, the nurse will greet you, validate your identity and help you get settled in your room. The anesthesiologist will go over the planned anesthesia with you, and your plastic surgeon will make the guiding marks on your body and make sure that you agree with the surgical plan.

After the surgery, you will be wearing a compression belt. For longer surgical procedures, a urinary catheter is placed while under anesthesia.

### **After the surgery**

After the surgery you are transferred to the recovery room where the anesthetist nurse and the anesthesiologist will monitor your heart rate and blood pressure. They will stay with you until you are fully awake. In the recovery room, pain-relieving treatment is initiated. Nausea can also be treated if needed. When you are fully awake you are escorted back to your room in the ward. The plastic surgeon then comes to see you and inform you about the course of the operation.

For large tummy tuck surgery you will be hospitalized for a minimum of 24 hours. This is to give you good support in getting back on your feet and to ensure good pain-relief and immediate observation of any sign of early complications. If a simultaneous lift of the abdominal wall has been performed, a physiotherapist will see you and instruct you in regards to exercises and how to manage when you return to your home.

The abdominal compression belt must be worn for 6 weeks after the operation. During the first 3 weeks it is to be worn both day and night, and during the last 3 weeks only while out of bed during the daytime. The compression belt reduces fluid accumulation under the skin and supports the abdominal wall.

After 14 days you will return to the hospital for a check-up with the nurse who will also

remove the stitches. An absorbable thread is used for the surgery, and only around the naval, stitches are to be removed manually.

### **Follow-up**

You are to have a consultation with your plastic surgeon three months after the surgery. At this point, the result of the surgery can be evaluated, and new photos will be taken for documentation.

### **Subsequent effects**

#### **Scars**

Figuratively speaking, loose skin is traded for scars. The larger the corrected area is, the longer the scar. To the extent possible, the scars are placed in a manner that makes it easy to hide them with underwear, except for the scar around the naval. During the first three months, the scars are red and swollen, but after this period they slowly lighten and flatten. It is recommended to use a band-aid as long as the scars continue to be red. This decreases the scars' tendency to redden and swell. It takes up to two years before the final result of the scars can be evaluated.

#### **Temporary swelling**

In the weeks after the operation there will be swelling of the operated area. This will fade away on its own. In the weeks after the surgery you must wear the compression belt in order to reduce swelling.

#### **Numbing**

Especially with extensive plastic surgery, several sensory nerves in the skin will be affected. This means that a triangular area of skin from the scar up to the belly button will be left with permanent numbness. This can be quite bothersome, especially right after the

surgery. With time, patients get used to the numbness, and so that it does not cause inconvenience in the everyday life.

## Complications

### **Bleeding**

After the surgery, the blood pressure increases. When this happens, one of the small blood vessels that have been cut during the surgery may burst and cause bleeding under the skin. In the case of larger bleedings, it is necessary to operate again. If this does happen, it is most likely while you are still hospitalized, and re-operation is initiated immediately by your plastic surgeon.

### **Infections**

Infections are caused by bacteria that may have infected the wound during the surgery, or more commonly have come into the wound through the new scar after you have returned to your home. For most cases, the infection in the scar is superficial; this can be treated by topical treatment and oral antibiotics. In rare cases, the infection can spread and make it necessary to open up or drain the scar during re-admittance to the hospital and intravenous antibiotic treatment. In severe cases, the infection can ruin the expected result of the operation.

### **Fluid accumulation and edema**

In the area where the skin has been detached from the muscles beneath, fluid may accumulate after the surgery. This is called edema. The body absorbs any fluid from smaller areas with edema, but if larger amounts of fluid accumulate, it may be necessary to drain the fluid during an ambulatory visit. In very rare cases, it is necessary to proceed with another surgery to prevent the fluid from reappearing.

## **Skin necrosis**

If the skin is tightened too much, or in the event of complications such as larger bleeding or infections, the blood circulation in the operated area is critically reduced. Fat tissue is very sensitive to low blood flow and dead fat tissue leaves a so-called fat-necrosis, which forms a hard lump that is sometimes sore and may be worrisome for the patient. Skin necrosis is very rare, but it requires a second operation to remove the dead skin, which may have great consequences for the aesthetic result.

## **Hypertrophic scarring**

Some patients have a tendency to produce a lot of scar tissue after surgeries: So-called hypertrophic scarring. All scars are red and swollen during the months after the surgery, but with hypertrophic scarring, the scars remain red and swollen for more than a year after the surgery. The scars are treated with band-aids for several months and may also be injected with steroid if the hypertrophy is severe. In rare cases, a disfiguring scar may be surgically corrected.

Hypertrophic scarring is different from keloid, which is an inherent disease in which scar tissue extends into the operated area. Patients with this condition are advised not to have cosmetic surgery.

## **Long-term results**

Correction of the skin and tissue of humans does not stop the aging processes. For this reason, no cosmetic surgery of this kind lasts “forever”. However, that which is removed will not return. Reoccurring overweight and weight loss will also cause more looseness of the skin.

The “durability” is individual and affected by genetic factors as well as external factors that may have affected the skin’s laxity (e.g. hormones, smoking) The “durability” will also be different depending on the type of surgery and in the sense that the more extensive the

surgery, the greater the effect and the long-term durability of the result.