# PRINTZLAU

# **PRIVATHOSPITAL**

## **Information on breast reduction**

Who is eligible for a breast reduction?

In Denmark we differentiate between a medical and a cosmetic breast reduction.

#### Medical breast reduction

The public health system offers breast reductions to women who have physical problems due to breast size, e.g. shoulder or neck problems or pain in the breasts. Some women may have problems with moisture and infections in the skin fold under the breast. In accordance the guidelines of Danish public healthcare's a minimum of 500 grams of tissue is to be reduced from each breast, before the Danish public healthcare can offer women the surgery free of charge.

#### Cosmetic breast reduction

For women who do not have these problems and for women on whom a 500 gram reduction will result in a breast that is too small, surgery with cosmetic intention is an option. Here, the purpose is merely to provide the woman the best possible aesthetic result, and often it commonly considered as important to tighten and lift the breast as it is to reduce its volume.

#### **Pregnancy**

When pregnant, the breast glands are stimulated to produce milk. The glands grow considerably in size, the nipples grow and the pigmentation of the nipple area changes. The skin

also expands as the size of the breast increases. The hormones accelerate the softening of the tissue and may induce ruptures in the dermis also known as stretchmarks. The hormonal effects are kept in effect during breastfeeding to stimulate continuous milk production. Many women experience that the breast is sagging more after a pregnancy, while some will find that their breasts have grown in size.

Age

A lot of women experience that bigger breasts seem heavier and with age. For a few women it may be that the breasts have actually grown, but for the majority the experience that the breast seems heavier occurs because breasts can "support themselves" while young, while breast support is relying more and more on a bra as the women age. The bra straps may carve into the shoulders and cause pain in the neck and shoulders.

**Obesity** 

Breasts are made up of both breast tissue and fat. Obesity makes the breasts larger. Obesity also triggers a hormonal change. This happens because the sex hormones are processed in fat tissue which results in a prolonged estrogen-like effect.

Normalizing weight before the surgery

It is important that the amount of fat tissue in the breast is minimal when a correction of the breast is performed. Partly because the fat tissue is very sensitive to the reduced blood circulation during the surgery, which causes substantially greater risks of complications, but also because a fat tissue in the breasts can make result unpredictable over time. Both aging and weight loss have an influence on the fat tissue in the breasts. It is advised against to have a breast reduction if your BMI is more than 30. BMI is calculated as (weight in kg) / height in meters)<sup>2</sup>

https://www.heartfoundation.org.au/bmi-calculator

Mammography before the surgery

If you are above 40 years old, it is advised that you have a mammography and an ultrasound

examination of your breasts before you proceed with surgery. This can reveal if there are

any signs of lumps forming in the breasts and reduces the worrying and discomfort if hard

lumps of scar tissue form after the surgery

How is the surgery carried out?

Anchor-shaped scar - Wise pattern

This type of breast reductions leave an anchor-shaped scar. This method avoids scars on

the upper part of the breast and towards the cleavage. Breast tissue is removed from the

lower part of the breast and the nipple is moved upwards on the reduced, smaller breast. The

removed tissue is inspected and sent microscopic examination if relevant.

Vertical scar - Vertical Breast lift

If the breast tissue has firmness, the horizontal scar in the skin fold under the breast can be

avoided. The technique leaves scars around the nipple and a vertical scar below it, reaching

from the bottom of the nipple to the skin fold under the breast.

The vertical scar must be vastly shortened during the surgery and has a tendency to stretch

during the healing process, leaving too much breast under the nipple, so-called 'bottom-

heavy' breasts. Because of this, the technique is only offered women who have firmness in

the tissue of the breasts and wish for a small reduction.

The very large breast lifts

In very large breast lifts where the nipple must be moved more than 15 centimeters and

more than one kilo of tissue is removed, it can be necessary to transplant the nipple. In this

process, the nipple loses its sensitivity as well as the ability to breastfeed.

# The process from first consultation to follow-up

#### First consultation

During your first consultation, the plastic surgeon will consult with you based on your wishes and expectations to the surgery in regards to possibilities and limitations. If you are a good candidate for breast reduction surgery, the plastic surgeon and you will determine what type of surgery is best suited for you. You will receive information about what is realistic to expect after the surgery and what consequences and risks the surgery may entail.

If you are above 40, it is a requirement that you have a mammography (x-ray of the breast) before the surgery. You can get a referral for a mammography at your general practitioner. The plastic surgeon will assess your overall health and whether it is necessary to draw blood samples or any further examinations before the surgery. Your breasts are meticulously photographed for "before and after" photos, if the operation is eventually carried out.

As a private patient you have the right to bring an assessor with you to your consultation, and we advise you do so. This provides you with an opportunity to discuss pros and cons for the surgery even after you have returned home. Danish legislation on "cosmetic treatment" requires that you wait a minimum of seven days from your first consultation before you can make an appointment for the desired surgery. This serves to protect you by preventing any impulsive or rash decisions to undergo cosmetic surgery. Patient referred from a public hospital are not bound by this legislation, but are advised to take the same precautions.

## The surgery

Breast reductions are performed under hospitalization and full anesthesia. Before any surgery under full anesthesia you are to be fasting for a minimum of 6 hours before the surgery, but you can drink water up until 2 hours before the surgery.

When you arrive, the nurse in the hospital ward will greet you, validate your identity and assign you your room. The anesthesiologist will explain the anesthesia to you, and your plastic surgeon will make the guiding marks on your body and ensure that you agree and

consent to the plan.

When the surgery is over, you will be equipped with a special surgical bra that you will also be wearing during the post-operative weeks. For larger breast reductions, it may be necessary to put in drains, which are small plastic tubes that remove blood and liquids during the first 24 hours following the surgery.

After the surgery

After the surgery you are transferred to the recovery room where the anesthetist nurse and the anesthesiologist will monitor you 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 smaller breast reductions, you may return to your home on the day of surgery, but for moderate to large surgeries you are hospitalized until the day after. The nurse will help you and ensure good pain-relief and immediate observation of any sign of early complications. If you have had drains put in, they will be removed before you are discharged from the hospital. Your plastic surgeon will come to see you again before you are discharged, typically on the morning after the surgery.

The bra is to be used both day and night for 3 weeks. It is recommended that you buy a quality sports bra which you can change into when the surgical bra is washed. After the first 3 weeks, it is recommended that you continue to wear a high-quality supportive bra without wires during the day for the first 3 months after the surgery. During this period, you can still wear bras with wires for special occasions without worrying about complications. S short check-up is scheduled 14 days after the surgery, and on this day, stitches are removed your stitches by a nurse. For the surgery, we use thread that is selfdissolving, however, the ends of the stitches must be removed manually.

#### Follow-up

A follow-up with your plastic surgeon is scheduled 3 months after your surgery. At this point, the final result of the surgery can be evaluated and new photos are taken as documentation.

# After the surgery

#### Scars

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.

## **Numbing**

There will always be an area of reduced sensitivity on the breast and nipple as a result of a breast reduction. In most women, the sensitivity of the skin slowly returns. The sensitivity of the nipples is especially critical. As mentioned, an incision is made all the way around the nipples regardless of the method used. This also means that the sensitivity of the nipples is reduced with breast reduction. For the nipples, we differentiate between the "sense of touch" and the "sexual sensitivity". The sense of touch is typically only affected for a short time after the surgery. The sense of touch is necessary for the nipples' ability to harden and breastfeed. For the majority of women, the sexual sensitivity of the nipple is permanently reduced after a breast reduction. Some women experience hypersensitivity, which is also bothersome, but the hypersensitivity usually fades over the course of the first year. As such, you should not proceed with a breast reduction unless you can accept the risk of losing the sexual sensitivity in the nipples.

# Temporary swelling

In the weeks following the surgery, the breasts will be swollen. The breast will seem almost "pumped" and take on a very round shape with a lot of volume in the upper part of the breast. The swelling gradually decreases over the course of 3 months. At this point, the breasts may seem slightly edgy as the vertical scar pulls the breast inwards a bit. This means that some

women feel a little disappointed because they wanted as firm and as voluminous a breast as possible. When the scars heal fully during the first year, the "edgy" look disappears, and the breasts attain their final shape.

#### **Breastfeeding**

Our plastic surgeons use techniques that leave the connections from the gland tissue and the nipple intact. Therefore, as a standard, the ability to breastfeed is preserved after a breast reduction. The exception is very large breast reductions that call for nipple transplants, or if complications arise wherein the sensitivity of the nipple is lost.

# **Complications**

## Bleeding (1%)

After the surgery, the blood pressure increases. When this happens, one of the small blood vessels that have been cut during the surgery may leak 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 the re-operation is initiated immediately by your plastic surgeon.

# Infection (5%)

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. In most cases, the infection of the scar is superficial; this can be treated by topical 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 surgery.

#### Dead tissue (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 can be seen in the areas where skin was joined from three points; below the nipple and under the breast. These complications may require a second operation but it is not always possible to achieve a pleasing result.

#### Loss of sensitivity(<1%)

The sensitivity of the skin on the underside of the breast may be reduced or "sleeping". Most patients experience this problem as less bothersome with time, even though the damage is permanent. This is likely because the brain gets used to the missing sensitivity. As mentioned, most patients will experience reduced sexual sensitivity of the nipples, but some experience no sensitivity and therefore also loss of the nipples' ability to harden. This is a sign that the mechanisms and signals that are necessary for stimulation of the milk production are impaired and thus the ability of breastfeeding is lost. If you become pregnant after a breast reduction, you should try to breastfeed anyway, as breastfeeding is often possible even with decreased sensitivity of the nipples.

## Hypertrophic scarring (2%)

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.

# **Durability**

A breast reduction is a permanent reduction of the size of the breast, but the tightening effect of the surgery is not permanent. Tightening of the skin and tissue in humans does not stop the aging processes. Therefore, there are no tightening surgeries that "last forever". However,

that which is removed will not return. Pregnancy, obesity and weight loss will also mean reoccurring sagging of the breasts. The tightening effect of a breast reduction is individual, and it is affected by both genetic factors and external factors (e.g. hormones, smoking).