

# PRINTZLAU

PRIVATHOSPITAL

## **Information on male breast development (gynecomastia)**

### Who is eligible for male breast development surgery?

A distinction is made between breast development with a known medical cause and breast development that occurs without any apparent medical reason. If a medical issue reveals itself to be causing the breast development, this of course has to be treated before proceeding with surgery.

### Causes

#### **Unknown cause**

In most cases, no cause of breast development in men can be found. During puberty, most boys will notice swelling and soreness in the small breast glands under the nipples. This usually subsides over the course of the teenage years and does not require any surgery. In some boys, the breast glands stay swollen or grow over the years. For those cases, surgery is an option.

#### **Hormones**

The male sex hormones are metabolized in the fat tissue and broken down into byproducts that have an effect like that of the female sex hormones. This means that men who abuse or naturally produce large amounts of male sex hormones may experience breast development. Most times it happens due to steroid abuse in relation to weight training, but it also happens that a tumor produces hormones, e.g. a testicle tumor.

## **Obesity**

A large amount of fat tissue in the body – obesity – may cause high levels of estrogen-like metabolism-products and as such it can cause breast gland development in men. Because obesity simultaneously results in increased fat tissue in the chest area, this worsens the problem. This type of breast gland development does not disappear with weight loss.

## **Side effects**

Certain types of medicine may have side effects that can cause breast gland development.

## **Malignant tumor**

Breast cancer is very rare for men, but should be ruled out as a possibility before proceeding with surgical treatment. The suspicion might arise if there is swelling of only one side of the chest or if there is breast development with simultaneous swelling of the lymph nodes in the armpit. If breast cancer is suspected, the patient is referred directly to a breast surgical department.

## **Public or private**

### **Medicinal surgery**

The Danish public health department offers treatment of any disease. Breast development in men is seen as a disease and is treated free of charge in the public health sector.

### **Cosmetic operation**

In some cases, the extent of the problem is determined to be merely cosmetic. Especially that is the case if the breast development is attributed to fat tissue rather than breast

tissue. In that case, cosmetic surgery is available within the private health sector. No matter the extent of the problem it is always recommended that any underlying medical causes of the problem are sought determined and treated before surgery.

## How is surgery for male breast development carried out?

The different techniques aim at the three different types of excess tissue that are related to male breast development: Fat tissue, gland tissue and skin.

### **Liposuction**

In mild cases, when the problem is mainly excess fat tissue, liposuction alone is an option. Typically, two small incisions of ½ cm is made in the crease of the skin under the breast. If the breast gland is a small, it is dissected into many small parts, so that bits of the gland can be removed. If a part of the breast gland remains under the chest skin, it may be prone to later stimulation in which case the problem will return. Liposuction does not provide good opportunities for microscopy of the removed tissue, so if there is suspicion of any cell changes, an open surgery is preferred.

### **Liposuction in combination with open surgery**

This procedure is the most frequently used technique for treating male breast development. In addition to liposuction, an incision is made on the border of the lower half of the nipple. Typically, liposuction comes first in order to loosen the breast gland so that it is easier to remove. The gland is removed through the incision on the lower border of the nipple, however a very thin wall of gland tissue is left right beneath the nipple, so that the nipple does not “collapse” after the surgery.

### **Open surgery with excess skin removal**

If the breast development has been going on for many years, or in the case of long-term obesity, it may be necessary to remove skin in addition to the removal of the gland and fat tissue. For this procedure, the incision is also made on the border of the lower part of the nipple, but the incision extends out to both sides as far as necessary in order to achieve sufficient tightening of the skin. The scars on the front of the chest will always be very visible, which is why this technique is only used when it is strictly necessary.

### **Surgery after major weight loss - thoracoplasty**

Overweight increases the risks of breast development, especially this is the case for obesity. Because of this, a lot of men who have been obese experience both increased breast volume and surplus skin around the front of the chest after major weight loss. This requires a surgery in which the primary focus is on the large amount of excess skin. Simultaneously, the nipples have to be lifted considerably.

The excess skin in the skin fold under the breast is removed, which leaves a long scar extending out below the armpits. The nipple can be lifted through a tunnel under the skin or it can be transplanted, which leaves a scar all the way around the nipple. Alternatively, the nipples can be lifted with a diagonal incision made simultaneously with the removal of excess skin, leaving an “anchor-shaped scar”.

Finally, a thoracoplasty can be performed as an upper body lift that also tightens and lifts the skin on the sides and the upper part of the back.

## **The course: 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. Before you can have surgery, the cause of the breast development has to be elucidated. Your general practitioner can assist you in determining and seeking out the cause. If you are a

good candidate for male breast development surgery, the plastic surgeon and you will determine what type of surgical approach 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.

Your chest is meticulously photographed for “before”-photos, if the operation is eventually carried out.

For cosmetic surgeries, you are always advised 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**

The surgery is performed during hospitalization and under general 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 show you to 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, a surgical bandage is applied. For smaller surgeries, band-aid strappings suffice, but for larger surgeries, you will be equipped with a compression vest. For the larger surgeries, 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 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 smaller surgeries, 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 strappings are to be worn for 4 days, but the compression vest is to be used both day and night for 3 weeks. You can buy an extra vest or an elastic t-shirt that you can change into when the compression vest is washed.

A short check-up is scheduled 14 days after the surgery, and on this day, your stitches are removed by a nurse. For the surgery, we use thread that is self-dissolving, 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**

You may experience reduced sensitivity on the chest and nipple skin as a result of the surgery. For most men, the sensitivity of the skin slowly returns. As mentioned, an incision is made on the lowermost border of the nipple skin. The sensitivity in the nipples is especially critical. Depending on the surgical technique used and the extent of the surgery, the sensitivity of the nipples will be reduced after a surgery for male breast development. Some men experience that sensitivity is increased for a while, which may also be bothersome, but typically fades away during the first year.

### **Temporary swelling**

In the weeks after the operation there will be swelling. The swelling gradually disappears over the course of 3 months. Only then, the final result can be evaluated.

## 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 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**

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.

## **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.

## **Durability**

Any surgery for male breast development will provide you with a permanent reduction of the size of the breast, but the tightening effect of the operation 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. Obesity or weight loss may lead to reoccurring loosenes or sagging of the skin on the chest. The tightening effect of the surgery is individual, and it is affected by both genetic factors and external factors that influence the skin's elasticity (e.g. hormones, smoking).