

# B10 Breast Reconstruction with Latissimus Dorsi Flap

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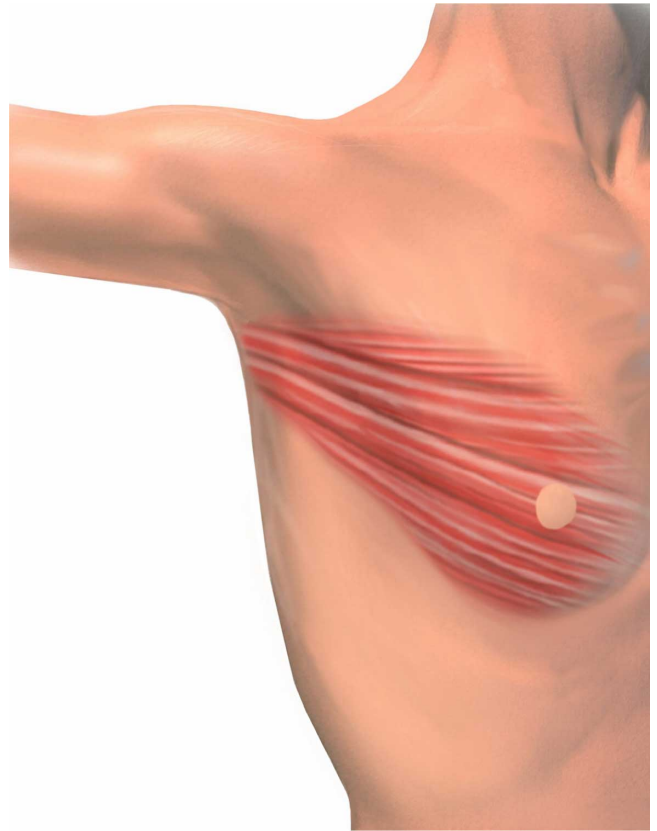
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## What is a breast reconstruction with latissimus dorsi flap?

A breast reconstruction is an operation to recreate a breast shape either at the same time (immediate) as you have your mastectomy (removing your breast) or at some time afterwards (delayed). Your surgeon will recreate a breast shape using the latissimus dorsi muscle, with some fat and skin from your back.

This operation can be combined with a breast implant to make a breast that is bigger than the back muscle and skin would make. The surgeon will tell you whether the muscle alone will be big enough. If an implant is used this may be a fixed volume (silicone) implant or an expander (adjustable size).



The muscle is used to recreate a breast shape

Your surgeon will assess you and tell you if a breast reconstruction is suitable for you. However, it is your decision to go ahead with the operation or not.

This document will give you information about the benefits and risks to help you to make an informed decision. If you have any questions that this document does not answer, it is important that you ask your surgeon or the breast team. Once all your questions have been answered and you feel ready to go ahead with the procedure, you will be asked to sign the informed consent form. This is the final step in the decision-making

process. However, you can still change your mind at any point.

## What are the benefits of surgery?

You should get a breast shape again. Your breasts will be more even and you will be able to wear better-fitting clothing as a result. Most women who have a successful breast reconstruction are more comfortable with their appearance.

The reconstructed breast will not have the same sensation as a normal breast. However, using tissue from your body will help give your breast a more natural shape and feel.

## Are there any alternatives to a breast reconstruction with latissimus dorsi flap?

Using padded bras or bra inserts can give the appearance of a breast shape when you are wearing clothes.

It may be possible to have a reconstruction using only an implant. The operation is usually shorter and the recovery time quicker. If you have an implant, your reconstructed breast may not feel as natural or be as close in shape to your other breast when compared to using your own tissue.

It is possible to use tissue from another area of your body, usually your lower abdomen or sometimes from your buttocks, inner thigh or

side. You will not usually need an implant for this type of reconstruction.

Your surgeon will have assessed the distribution of fat on your body and risk factors such as obesity (being overweight), smoking or scarring before recommending a reconstruction using the latissimus dorsi muscle.

## What will happen if I decide not to have the operation?

A breast reconstruction will not improve your physical health. Your surgeon may be able to recommend an alternative to recreate a breast shape.

## What does the operation involve?

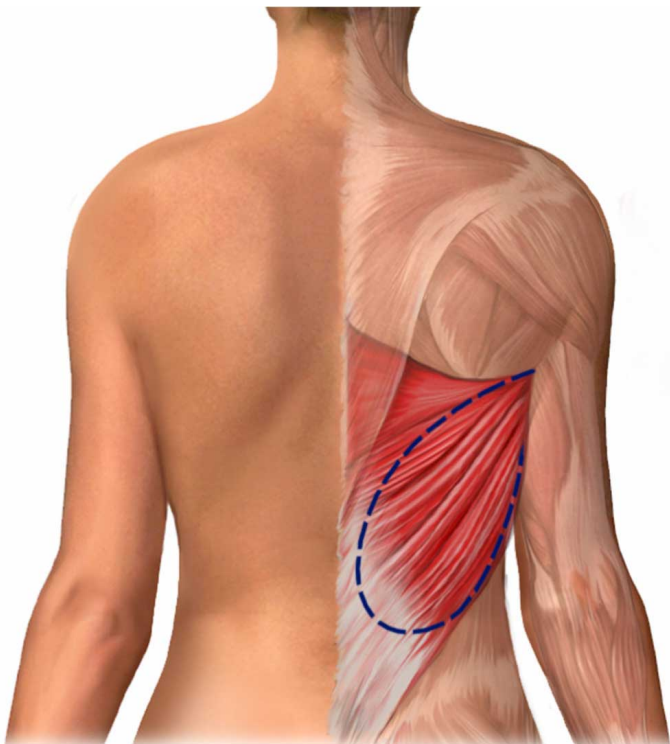
The breast cancer team will carry out a number of checks to make sure you have the operation you came in for and on the correct side. You can help by confirming to your surgeon and the breast team your name and the operation you are having.

The operation is performed under a general anaesthetic and usually takes 4 to 6 hours. You may also have injections of local anaesthetic to help with the pain after the operation. You may be given antibiotics during the operation to reduce the risk of infection.

Your surgeon will make an elliptical (oval) cut on your back, usually along

the natural creases of your skin. If you have had surgery before they may open old scars. If you have not had surgery before, they will need to make new cuts on your breast. Your surgical team can discuss the scars you are likely to have. Sometimes a cut under the arm is needed too.

They will lift the latissimus dorsi muscle along with a small patch of skin that will be used to replace the areola (the darker area around your nipple) and nipple or some breast skin. They will keep the blood supply to the muscle, and move it under your arm to the front of your chest to create a breast shape.



An elliptical cut is made to move the muscle

Your breast cancer team will shape the flap into a breast shape on your chest. If you are having the operation at the same time as a mastectomy it

may be possible to preserve your breast skin and nipple. Your breast cancer team will discuss this with you before the operation. If this is a delayed reconstruction some of your back skin will be used to help with the breast shape and will be visible on the chest. This means any skin changes such as scars, stretch marks or tattoos on your back will be visible on the chest.

Depending on the size of your other breast, your surgeon may move some fat from your back with the latissimus dorsi muscle to increase the size of your reconstructed breast (extended flap). Your surgeon may recommend an implant or expander with the flap, to increase the size of the reconstruction and achieve better symmetry. If you need an implant your surgeon will create a pocket under the muscle to place the implant in.

## Breast implants

Various types, different shapes and sizes of implant are available. All implants are made of an outer layer (shell) of silicone or polyurethane. They can be filled with silicone or saline.

If you have already had a mastectomy, or radiotherapy or if the reconstruction skin is tight, your surgeon may need to use a tissue expander. Over a number of weeks your surgical team will gradually fill the tissue expander with saline

through a small tube (port) to stretch your skin and make your breasts similar in size.

Your surgeon will discuss the options with you and recommend the most appropriate type and size for you if an implant is needed for larger volume reconstruction.

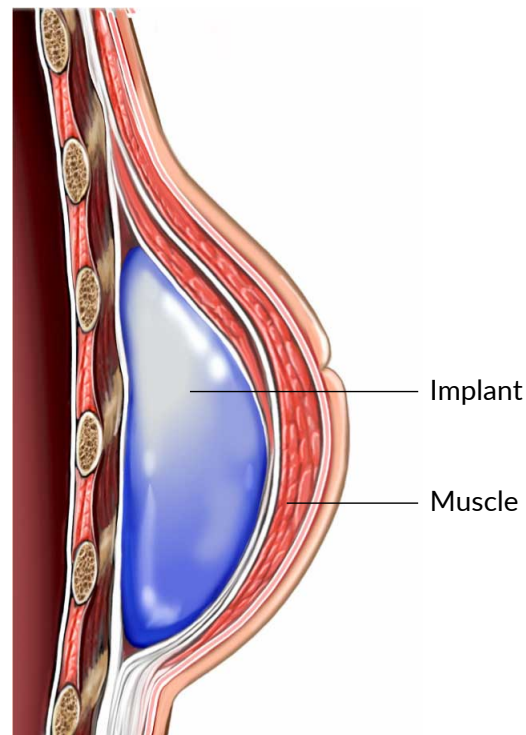
### Are implants safe?

Silicone is widely used in healthcare to make heart-valve replacements, facial implants and tubes used to give people medication.

Many studies have been carried out to find if silicone breast implants are safe. There is no evidence to suggest that women with silicone breast implants have a higher risk of developing diseases such as breast cancer and arthritis.

There is a reported link between having an implant and a rare type of cancer called anaplastic large-cell lymphoma (ALCL). The risk is approximately 1 in 10,000 and this may vary, depending on the implant. ALCL near an implant is not as serious as it is when it happens elsewhere in your body. It is linked to textured implants and you can talk to your doctor about your risk level for ALCL. If you develop a collection of fluid (seroma), a breast lump or swelling around your implant more than a year after having the breast implant, speak to your healthcare team.

Your surgeon will insert drains (tubes) under your skin to help the cuts in your chest and back to heal. They will close the cuts with stitches. Your surgeon will usually place the stitches under your skin so you will not be able to see them. The stitches will eventually dissolve and the cuts will usually heal to neat scars. Back scars are usually straight and can normally be covered by a bra. Breasts scars vary and they will usually be covered by a bra cup.



The implant is placed behind the muscle

### What should I do about my medication?

Make sure your breast cancer team knows about all the medication you take and follow their advice. This includes all blood-thinning medication as well as herbal and complementary



remedies, dietary supplements, and medication you can buy over the counter.

## What can I do to help make the operation a success?

If you smoke, stopping smoking now may reduce your risk of developing complications and will improve your long-term health.

Try to maintain a healthy weight. You have a higher risk of developing complications if you are overweight.

Regular exercise should help to prepare you for the operation, help you to recover and improve your long-term health. Before you start exercising, ask the breast cancer team or your GP for advice.

You can reduce your risk of infection in a surgical wound.

- In the week before the operation, do not shave or wax the area where a cut is likely to be made.
- Try to have a bath or shower either the day before or on the day of the operation.
- Keep warm around the time of the operation. Let the healthcare team know if you feel cold.
- If you are diabetic, keep your blood sugar levels under control around the time of your procedure.

If you have not had the coronavirus (Covid-19) vaccine, you may be at an increased risk of serious illness related

to Covid-19 while you recover. Speak to your doctor or breast cancer team if you would like to have the vaccine.

## What complications can happen?

The breast cancer team will try to reduce the risk of complications.

Any numbers which relate to risk are from studies of people who have had this operation. Your doctor may be able to tell you if the risk of a complication is higher or lower for you. Some risks are higher if you are older, obese, you are a smoker or have other health problems. These health problems include diabetes, heart disease or lung disease.

Some complications can be serious and can even cause death.

Your anaesthetist will be able to discuss with you the possible complications of having an anaesthetic.

## General complications of any operation

- Bleeding during or after the operation (risk: 2 to 3 in 100). You may need a blood transfusion or another operation and it is common for your chest or back to be bruised.
- Blood clot in your leg (deep-vein thrombosis – DVT). This can cause pain, swelling or redness in your leg, or the veins near the surface of your leg to appear larger than normal. The

breast cancer team will assess your risk. They will encourage you to get out of bed soon after the operation and may give you injections, medication, or special stockings to wear. Let the healthcare team know straight away if you think you might have a DVT.

- Blood clot in your lung (pulmonary embolus), if a blood clot moves through your bloodstream to your lungs. Let the breast cancer team know straight away if you become short of breath, feel pain in your chest or upper back, or if you cough up blood. If you are at home, call an ambulance or go immediately to your nearest Emergency department.
- Infection of the surgical site (wound). It is usually safe to shower after 2 days but you should check with the healthcare team. Let the breast cancer team know if you get a high temperature, notice pus in your wound, or if your wound becomes red, sore or painful. An infection usually settles with antibiotics and any pus may need to be removed. You may need special dressings and your wound may take some time to heal. In some cases another operation might be needed. Do not take antibiotics unless you are told you need them.
- Allergic reaction to the equipment, materials or medication. The breast cancer team is trained to detect and treat any reactions that might happen.

Let your doctor know if you have any allergies or if you have reacted to any medication or tests in the past.

- Acute kidney injury. A significant drop in your blood pressure during the operation can damage your kidneys. The breast cancer team will monitor your condition closely to reduce the chance of this happening. Any kidney damage is usually short lived although some people may need to spend longer in hospital and a small number can go on to develop chronic kidney disease that may require dialysis.
- Chest infection. If you have the operation within 6 weeks of catching Covid-19, your risk of a chest infection is increased (see the 'Covid-19' section for more information).

## Specific complications of this operation

### Breast reconstruction complications

- Developing a lump under your wound caused by fluid collecting (seroma). This is normal, with the fluid usually collecting under your wound in your back. If too much fluid collects or is causing discomfort, it can be removed using a needle.
- Developing a lump under your wound caused by blood collecting (haematoma). You may need another operation to remove the blood and you may need a blood transfusion.

- Loss of the flap, if the blood supply to the muscle is not good enough or if it was too difficult for your surgeon to maintain a healthy blood supply (risk: 1 in 100). You will need another operation to remove the flap and implant. You may also need a skin graft to close your wound. The risk is higher if you smoke, have large breasts, are overweight or have other medical problems such as diabetes.

- Skin necrosis, where some of the original breast skin at the edge of your wound on your breast (risk: up to 5 in 100) or back dies leaving a black area. You may need another operation to remove the dead skin or, rarely, a skin graft using skin from another area of your body. If a lot of skin dies, you may need another operation to remove the flap and implant until your breast has healed. The risk is higher if you smoke, have large breasts, are overweight or have other medical problems such as diabetes.

- Unnatural movement or twitching of the reconstructed breast when you use your arm. This tends to settle with time. If it continues, you may be able to have a further procedure to make the problem less noticeable.

- Difference in shape and appearance. Your surgeon will try to make your reconstructed breast as similar as possible to your other breast.

- Numbness or continued pain around your armpit or the inner part of your arm caused by injury to the small

nerves that supply your skin. Any pain usually gets better within a few weeks. Numbness can last for up to 6 months and can sometimes be permanent.

- Permanent numbness around the scar in the back and on most of the surface of the reconstructed breast. Over time the area of numbness may get smaller and you may start to get a return of sensation. You should be careful not to burn yourself.

- Stiff shoulder. Unless you are a high-level athlete, you will usually be able to return to normal activities. The breast cancer team will give you exercises and it is important that you do them to keep your shoulder moving. Take painkillers as you are told if you need to relieve the pain so you are able to exercise.

- Arm weakness. The latissimus dorsi muscle is the largest muscle in your back and is used to pull your arm down and your body up. Other muscles can do these movements but you will notice that you cannot perform as well when playing certain sports. It can take up to a year to recover.

Fewer than 12 in 100 women will get a complication related to the breast reconstruction in the first 30 days.

### Implant complications

- Developing a collection of fluid (seroma) in the pocket where the implant is (risk: 1 in 30). This is not



usually serious and settles with time. Sometimes the fluid needs to be removed using a needle. If the seroma becomes large and keeps coming back (a pseudocyst), the implant may need to be removed and replaced (risk: less than 1 in 100). If the problem continues you will need to wait at least 2 months and until any swelling or inflammation has settled before you can have another implant.

- Infection of the implant (risk: 5 in 100 over a lifetime). The risk is higher if you smoke, are overweight, have had radiotherapy or have other medical problems such as diabetes. Your surgeon will need to remove the implant. You will need to wait for about 3 to 4 months, while the infection clears and your wound heals, before your surgeon can replace it. If the skin around your scar is red and your wound is painful and swollen, let your doctor know.

- Capsule contracture, where scar tissue that your body naturally forms thickens and tightens around the implant (risk: up to 1 in 10 in 1 year, the lifetime risk is not known but the risk increases each year the implant is in place). The scar tissue can make your breast feel hard and can cause the shape to change. The risk is higher if you need radiotherapy after the operation. In severe cases your breast can become painful and the implant will need to be removed and replaced. This is the most common reason for

needing to have an implant replaced. The risk may be lower if you have polyurethane-coated implants.

- Kinking and rippling caused by a capsule forming or by natural sagging of your skin. This is more common if you have a liquid silicone implant. Sometimes it is possible to feel the edge of the implant under your skin.

- Rupture of an implant. This can happen when your surgeon is inserting the implant, by trauma (where a physical force is applied directly to your breast) or by the implant simply wearing out over time. Unless you have a saline-filled implant (which would deflate) you would not normally be able to notice that an implant has ruptured. If you think your implant may have ruptured, you should have an MRI scan to check as a ruptured implant should be removed.

- Movement of the implant. It takes 4 to 6 weeks for the implant to attach to the surrounding tissue. Strenuous activity or too much fluid collecting around the implant may cause it to move out of place and the breast reconstruction will change shape. You may need another operation to move it back.

- Rare cancer (anaplastic large-cell lymphoma - ALCL) (risk: 1 in 10,000).

Fewer than 4 in 100 women will get a complication related to the implant in the first 30 days.

## Covid-19

A recent Covid-19 infection increases your risk of lung complications or death if you have an operation under general anaesthetic. This risk reduces the longer it is since the infection. After 7 weeks the risk is no higher than someone who has not had Covid-19. However, if you still have symptoms the risk remains high. The risk also depends on your age, overall health and the type of surgery you are having.

You must follow instructions to self-isolate and take a Covid-19 test before your operation. If you have had Covid-19 up to 7 weeks before the operation you should discuss the risks and benefits of delaying it with your surgeon.

## Consequences of this procedure

- Pain. The breast cancer team will give you medication to control the pain and it is important that you take it as you are told so you can move your arm freely to prevent your shoulder from getting stiff.
- Unsightly scarring of your skin.

## How soon will I recover?

### In hospital

After the operation you will be transferred to the recovery area and then to the ward.

After 1 to 2 days the breast cancer team will recommend exercises for your arm and it is important that you do these exercises regularly after you go home.

The breast cancer team will advise you about starting to wear a supportive bra, usually before you leave hospital. Do not wear a bra that has wiring.

You should be able to go home after 2 to 5 days with the drains still in place, and come back to have them removed. However, your doctor may recommend that you stay in a little longer.

If you are worried about anything, in hospital or at home, contact the breast cancer team. They should be able to reassure you or identify and treat any complications.

## Returning to normal activities

To reduce the risk of a blood clot, make sure you carefully follow the instructions of the breast cancer team if you have been given medication or need to wear special stockings.

You should be able to return to normal activities after 4 to 6 weeks. Wearing a soft, well-fitted bra will help to relieve any discomfort.

You should be able to return to work after a few weeks. It can take 3 to 6 months to get back to your normal energy levels.

Do not lift anything heavy or do strenuous exercise, such as vacuuming

or ironing, for 3 weeks. Do not play rigorous sports, such as tennis, horse-riding, golf or aerobics, for 2 months. You should be able to do a limited amount of activity, such as lifting young children, after about 2 weeks.

Even though you will no longer have the use of your latissimus dorsi muscle, you should not notice a difference in your normal activities. If you are a high-level athlete, your performance may be affected.

If you have a reconstruction with a latissimus dorsi flap on both sides, you may find it more difficult to lift or pull yourself up.

If your surgeon moved fat from your back to increase the size of your reconstructed breast, you may notice a change in the shape of your back.

Regular exercise should help you to return to normal activities as soon as possible. Before you start exercising, ask the breast cancer team or your GP for advice.

Do not drive for at least 3 weeks. You should be able to control your vehicle, including in an emergency, and comfortable wearing a seat belt. Always check your insurance policy and with the breast cancer team.

Ask your breast cancer team if you need to do a Covid-19 test when you get home.

## The future

The breast cancer team will arrange for you to come back to the clinic after 2 to 4 weeks. At the clinic your surgeon will check your wounds and tell you when you can return to work.

If your surgeon needed to use an expandable implant, you will need to come back to the clinic regularly. Once your skin has stretched enough and your breasts are similar in size, your surgeon may remove the port and leave the expandable implant in place. Your surgeon will usually recommend replacing the expandable implant with a permanent one.

The shape of your reconstructed breast takes several weeks to settle. It can take up to a year for you to feel as if your reconstructed breast is part of you.

Your surgeon may arrange for you to come back to the clinic after 6 to 12 months when the reconstructed breast has begun to drop to its longer-term position. At the clinic you will be able to discuss with your surgeon how satisfied you are with the reconstruction and if you need any further procedures such as a nipple reconstruction, breast uplift or reduction to your other breast or a fat-transfer procedure (lipofilling).

If you have any concerns or notice any of these changes to your breasts, contact your GP.

- Redness

- Swelling
- Lumps in your breast or armpit
- Uneven shape
- Change in appearance

Even if the operation is a success, if you have an implant you may need another operation at some time in the future to have it replaced or removed. Also, gravity and the effects of age will change the shape and size of your breasts.

1 in 5 women has another operation in the first 5 to 6 years as a result of a complication or because she is not happy with the result (revision surgery).

## Summary

A breast reconstruction with latissimus dorsi flap is an operation to recreate a breast shape. You should consider the options carefully and have realistic expectations about the results.

Surgery is usually safe and effective but complications can happen. You need to know about them to help you to make an informed decision about surgery. Knowing about them will also help to detect and treat any problems early.

Sometimes there are research trials that you could choose to take part in. Your breast team will let you know if there is something you are suitable for and give you written information.

Keep this information document. Use it to help you if you need to talk to the healthcare team.

Some information, such as risk and complication statistics, is taken from global studies and/or databases. Please ask your surgeon or doctor for more information about the risks that are specific to you, and they may be able to tell you about any other suitable treatments options.

This document is intended for information purposes only and should not replace advice that your relevant healthcare team would give you.

## Acknowledgements

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