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Information for patients and carers

Intercostal Artery Perforator Flap

Excellent care with compassion

Women and Children's Division - Breast Surgery

@LancsHospitals

Your surgeon may consider performing a chest wall perforator flap to fill the defect created by the removal of your cancer. This leaflet gives further information relating to this operation.

There are different kinds of chest wall perforator flaps, and they are named after the blood vessel that supplies blood to it.

Your surgeon may have used the following terms to describe it:

- LICAP (Lateral Intercostal Artery Perforator Flap)
- AICAP (Anterior Intercostal Artery Perforator Flap)
- MICAP (Medial Intercostal Artery Perforator Flap)

If you have any further doubts or questions, please contact your breast care nurse. Contact numbers are given at the end of this leaflet.

What is an intercostal artery perforator flap reconstruction and who is suitable for this procedure?

Intercostal artery perforator flap reconstruction, also referred to as partial breast reconstruction, is often used to prevent significant defects in the breast following breast conservation surgery (this is also known as a 'Lumpectomy' and is when only the cancer and the surrounding tissue is removed) for breast cancer.

If the breast cancer is in the outer or lower aspect of the breast, then you may be suitable for this kind of procedure.

The aim of the procedure is to fill the defect in the breast caused by the removal of cancer.

There is often spare tissue under the arm or just below the breast crease. During this procedure this spare tissue is used to fill the defect in the breast after removing the cancer. It is done at the same time as your cancer operation. By filling this defect with this spare tissue, it

leaves the patient with a better cosmetic outcome and restores the normal breast shape and contour.

When the spare tissue is used it is only the skin and fat that are used. No muscle is used; hence it does not affect the functioning of your arm or chest wall muscles. The tissue used is taken along with its blood vessels, which helps to keep the tissue alive and healthy.

You will have the opportunity to see photographs of patients who have had this procedure.

How and when is the operation performed?

This operation is performed at the same time as your cancer operation.

You will have either a long scar along the lower breast crease or along the side breast crease. Sometimes, this scar may extend towards your back.

If you need surgery for the lymph nodes, this may be done through the same scar if we are taking the tissue from the side chest wall to reconstruct the breast. If the tissue below the chest wall is being used to fill the defect, then you will have a separate scar in the armpit.

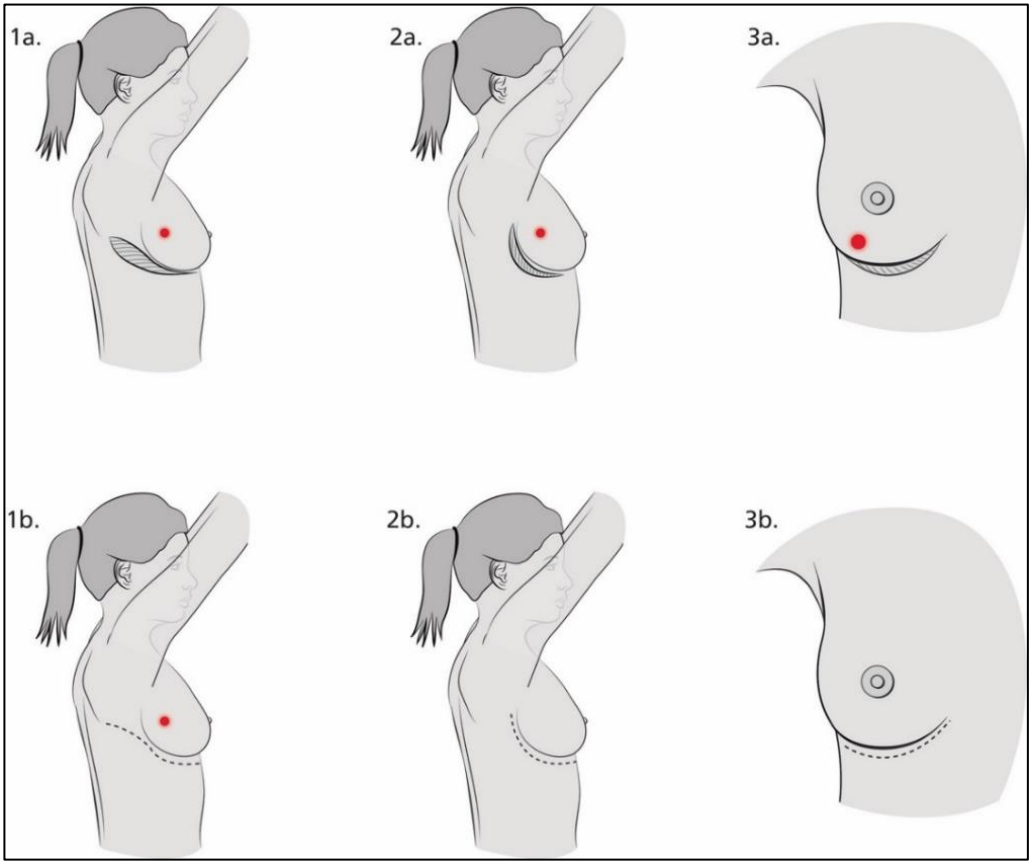
What happens on the day of the surgery?

On the morning of your operation, the surgeon with mark your breast and show you where the scar will be. The surgeon will also show you which part of the chest wall will be used to fill the defect in the breast. Your surgeon will use a small handheld ultrasound (Doppler) to identify and mark the small blood vessels which will supply blood to the tissue being used to fill the defect in your breast.

Photographs are often taken before and after the procedure for comparison and occasionally during the operation. Photographs are anonymous and include only the breast. This will only be done if you agree to it.

The diagrams below show examples of scars that you may expect depending on which part of chest wall is used to fill the defect in the breast.

Schematic diagram of different flaps and final scar.



- ***Fig 1a and 2a shows chest wall tissues taken to fill the defect in the breast when using LICAP flap.***
- ***Fig 3a shows AICAP or MICA.***
- ***Fig 1b, 2b and 3b shows the final scar for the respective flaps.***

What are the benefits of this surgery?

The main benefit is that this kind of procedure helps with conserving the breast even in the presence of a slightly larger cancer. By removing the cancer without filling the defect in this way can lead to a distorted appearance of the breast with a significant defect; this may impact the cosmetic appearance of the breast and the patient's quality of life.

Risks associated with chest wall perforator flaps

All operations involve risks and benefits, and you need to be aware of these so that you can make an informed decision about your operation. Your surgeon will go through all this at the time of consenting.
If you are a smoker, it is advisable to stop smoking to reduce the risks of complications following the operation.

Bleeding / bruising

Bruising is quite common after breast surgery, but this usually settles down by itself after a few weeks. Further surgery may be required if bleeding persists or if there is a bigger collection (haematoma) following the surgery. This is however very rare (affecting fewer than 5% of people having this surgery).

Infection

Wound infection is rare following breast operations and can be treated with antibiotics and dressings. Infection is more common in diabetics, smokers, and obese patients.

If you are feeling unwell after the operation, have a temperature, or notice any redness around the wound or discharge from the wound, please contact the breast unit during their working hours which are detailed on page 10 of this leaflet. Please contact your GP or emergency on call services outside of these hours.

Pain

Severe pain is unusual after breast surgery, but you will need some pain relief after the operation. Most of the time simple pain relief such as paracetamol, codeine or ibuprofen are enough to manage pain after the operation.

Seroma

Sometimes the surrounding breast tissue produces fluid after the operation, and this fills in the cavity from where the cancer was excised. This is called a seroma and may cause swelling of the breast.
It usually gets absorbed in a few days but if it is causing discomfort, it can be aspirated in the breast clinic using a needle.

Further surgery

When breast conservation surgery is performed, there is 10% risk (1 in 10 people) of needing a further operation to ensure that the entire cancer is removed, along with a rim of normal breast tissue. If this is the case, this will be discussed at your follow up appointment, 2-3 weeks after your operation, and you may need a second operation to remove more breast tissue. Occasionally, the second operation may involve removing your entire breast (mastectomy).

Wound breakdown

Some patients may have a breakdown of the wound after the operation. This is generally rare but can be seen in smokers or obese patients. Most of the time this can be managed with special dressings. Rarely, it may involve a second operation for re-suturing the wound.

Loss of sensation

You may notice numbness or increased sensation in the skin around the scar. This may last for a few months and often improves with time.

Loss of flap

There is small risk (1%) of the flap not working due to damage to the blood supply to the flap. This may lead to further surgery.

Inability to proceed with the reconstruction

There is a very small possibility that your surgeon is unable to proceed with this procedure due to lack of adequate blood supply to the flap. In such a scenario, the cancer operation will still go ahead. Cancer will be removed from your breast, and you will then be offered alternative forms of reconstruction after completion of all planned cancer treatments.

Fat necrosis

You may notice a firm lump (or lumps) at the site of the flap which is usually painless. This happens if fatty tissue in the flap is damaged due to loss of blood supply or due to any other cause.

Scarring

This kind of surgery usually results in a long scar along the breast crease and occasionally going towards your back which is usually hidden by most clothing including a bra. The scar is usually more prominent soon after your operation but becomes quite faint with time. This may take a year or more, depending on how well you heal. With time, the scar may occasionally stretch and look wide.

Shoulder stiffness

You may experience stiffness of your shoulder or tightness along the scars. This may be more if you have an operation to remove some or all of your lymph nodes from under the arm. We recommend that you continue doing the exercises as advised by the physiotherapist. You will receive separate written information regarding this.

Deep vein thrombosis (DVT) / pulmonary embolism (PE)

A blood clot can form in the deep veins of your legs and can migrate to the lungs following any surgery or general anaesthetic. The risk of clots can be reduced by wearing special stockings or by an injection in your stomach which helps to make your bloods thin and prevent them from clotting. Being mobile also helps to prevent the risks of clots. We therefore advise you to move around as soon as you are able to get out of bed after the operation and generally stay active after you return home.

What happens after your surgery?

On your return to the ward, the nurses will check your blood pressure and pulse rate and check your dressings/wounds. Nurses will also check if you are in pain and give you pain relief as required.

General advice after your breast operation

The wound is closed with dissolvable stitches which are under the skin. You will either have a dressing or glue over the wound. You should keep the dressing and wound dry for 48 hours after which you may have a shower. Refrain from having a bath until the wound has healed completely. If you have a dressing and it comes off partly or gets soaked, please remove the dressing and keep the wound dry.

You may or may not have a drain inserted at the time of the operation. This is a fine plastic tubing that helps to drain any fluid collection and will be used only if you are having all your lymph nodes removed at the time of the operation. The chest wall perforator flap does not require a drain. A district nurse will check the drain output daily after your discharge and will remove the drain when it drains <30 mls over a 24-hour period.

The scar may feel tight immediately after the operation. This however tends to settle down within a few weeks. It is advisable to continue doing gentle shoulder exercises to regain full range of shoulder movement.

If you wear a bra, we recommend that you bring a soft supportive (non-wired) bra when you come for the operation. A front opening bra is preferable in order to avoid lifting your arms above your head. We advise you to wear a supportive bra for 1-2 weeks after the operation.

You will need to sleep on your back for 2 weeks. Avoid any strenuous activity and sports for 4-6 weeks. Avoid driving for the first 2 weeks.

Follow up

You will be seen in clinic 2-3 weeks after your operation to review the wound and discuss the results of your operation.

If you have any concerns regarding your wound prior to the clinic appointment, please contact the breast unit or your breast care nurse.

Contact details

Breast Unit (Mon- Fri 8AM- 5PM)

01257 245588 /245690

Breast care nurses (Mon- Fri 8AM- 5PM)

01257 245690

Secretaries to Consultant Breast Surgeons (Mon- Fri 8am- 5pm)

01257 245243
01257 245516

Sources of further information

www.lancsteachinghospitals.nhs.uk
www.nhs.uk
www.accessable.co.uk
www.patient.co.uk

All our patient information leaflets are available on our website for patients to access and download:

www.lancsteachinghospitals.nhs.uk/patient-information-leaflets

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Lancashire Teaching Hospitals is a smoke-free site. Smoking is not permitted anywhere on any of our premises, either inside or outside the buildings. Our staff will ask you about your smoking status when you come to hospital and will offer you support and advice about stopping smoking this will include Nicotine Replacement Therapy to help manage your symptoms of withdrawal and the opportunity to speak to a nurse or advisor from the specialist Tobacco and Alcohol Care Team.

If you want to stop smoking, you can also contact the Quit Squad Freephone 0800 328 6297.

Please ask if you would like help in understanding this information. This information can be made available in large print and in other languages.

Gujarati:
આ માહિતીને સમજવામાં સહાયતા જોઇતી હોય તો કૃપા|કરીને પૂછો. આ માહિતી મોટા છપાણ માં અને અન્ય ભાષામાં ઉપલબ્ધ કરી શકાય છે.

Romanian:
Vă rugăm să întrebați dacă aveți nevoie de ajutor pentru înțelegerea acestor informații. Aceste informații pot fi puse la dispoziție în format mare și în alte limbi."

Polish:
Poinformuj nas, jeśli potrzebna jest ci pomoc w zrozumieniu tych informacji. Informacje te można również udostępnić dużym drukiem oraz w innych językach

Punjabi:
ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਸਮਝਣ ਵੱਚਿ ਮਦਦ ਲੈਣੀ ਚਾਹੋਗੇ ਤਾਂ ਕਰਿਪਾ ਕਰਕੇ ਇਸ ਬਾਰੇ ਪੁੱਛੋ। ਇਹ ਜਾਣਕਾਰੀ ਵੱਡੇ ਪ੍ਰਰੰਟ ਅਤੇ ਹੋਰਨਾਂ ਭਾਸ਼ਾਵਾਂ ਵੱਚਿ ਮੁਹੱਈਆ ਕੀਤੀ ਜਾ ਸਕਦੀ ਹੈ।

Urdu:
دو سر ی زبـــانوں او ر بـڑ ی اگـر آپ کـو ہی معلومـات سـمجھنے کـے یـئے ل مدد ی ک ضـرورت ہے تـو ی ئچھپا ی ہی ی بـــھ ابـی دسـت ہو ی سـکت ہے بـرا ئے مہر ی بـان پـو ے ی چھ ہی۔ معلومـات

Arabic:
مطبـو عة بـأ حر ف كبـــير ة و بلغـــات إذا كنتَ تـر يـد مسا عدةً فـي فهـم هذه لمعلـــو مات يُر جى أن .تطلـــب أخرى يمـكن تـو فـــير هذه المعلـــو مات

Department: Breast Surgery
Division: Women and Children's
Production date: March 2023
Review date: March 2026
JR 692 v1