

# Partial Breast Reconstruction LICAP (Lateral Intercostal Artery Perforator) Flap

Information and advice for patients

## Breast Surgery

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### What is LICAP flap procedure for partial breast reconstruction?

This is a procedure where the excess soft tissue from below the armpit is used as a flap to fill the cavity remaining after a lumpectomy for tumours located in the outer parts of the breast. The aim of the procedure is to replace the tissue lost during the lumpectomy and to restore the size and shape of the breast.

A Lumpectomy is a surgical procedure to remove cancerous breast tissue along with a rim of normal tissue surrounding it called a surgical margin. The procedure preserves the rest of the breast as well as sensation in the breast. Your doctor may also refer to it as a wide local excision, segmental resection, or partial mastectomy.

### Am I suitable?

The procedure is suitable for women who have small to moderate sized breasts, where the tumour is located on the outer part of the breast, and where a suitable amount of soft tissue is available below the armpit. Please note that this procedure may not be appropriate for patients who have a very small build. After examination, your doctor will be able to tell whether you are suitable for this procedure. There may be times where your medical condition means this surgery will not be suitable for you.

### What are the benefits of this procedure?

When a patient needs to have more than 20% of their breast removed as part of a lumpectomy, the procedure can often give the breast an unusual appearance, especially after radiotherapy. This surgery restores the size and shape of the breast and can prevent further corrective surgery.

### What is expected during the outpatient consultation?

After considering the different options for your surgery, if you and your doctor agree for the LICAP procedure, your doctor will explain the risks and benefits in detail to you. You will be asked to sign a consent form. You will have an opportunity to discuss your surgery and aftercare with the breast care nurses. You will also be shown photographs of the procedure so you know what to expect.

## **What if I need surgery for my armpit?**

If armpit surgery for a lymph node biopsy or clearance is required, it will be carried out through the same scar.

## **What are the risks of the LICAP flap procedure?**

The main risk of this procedure is blood supply to the flap. This can result in hardening of the breast where the flap is placed (up to 5%). This may lead to further biopsies in future. There is a small risk of 'flap' failure, where blood supply is completely damaged. This will require further surgery. This risk is higher in patients who have diabetes and in patients who smoke.

## **Lumpectomy risk**

The aim of a lumpectomy is to remove a tumour with a margin of normal breast tissue. If the margins are too close to the main tumour, then you may need further surgery to obtain more tissue. This could also apply to simple lumpectomy (between 8-17%).

Other risks include altered sensation along the scar line. Sensation usually returns within two to three months' time. There is a small risk of fluid collecting at the site of the operation. If this causes too much discomfort it can be drained at one of our Outpatient clinics.

You may feel some tightness under your armpit immediately after the operation and experience some stiffness in your shoulder. As with any other operation, the risks of this procedure also include bleeding, infection and deep vein thrombosis. To reduce the risk, you will be given compression stockings and an anticlotting injection.

If you are a smoker, it is advisable to stop smoking to reduce the risk of complications.

## **Journey through your operation**

### **Pre-operative period (before your operation)**

You will be pre-assessed a few days before surgery. Routine checks and blood tests will be carried out to ensure you are physically fit for surgery. You will also be asked to give consent for photographs to be taken before and after your operation for medical records.

You are required to attend the ward at BTC or Main hospital on the morning of your surgery where you will meet your surgeon and anaesthetist. Please refer to your pre-assessment instructions for fasting. There will be an opportunity for you to ask questions if you need further clarification. You are required to bring a highly supportive sports front-opening bra with you and will be required to wear this 24/7 for at least six weeks after surgery. Your breast care nurse will advise you if you are not sure what to buy.

Your surgeon will confirm your consent form and will mark the flap and area of your blood vessels while you are in a semi-flat position. A hand-held Doppler machine uses ultrasound and is a non-invasive test. It will be used to identify your blood vessels. If you need interventions, such as a sentinel lymph node injection or wire placement, these will be performed on the morning of your surgery.

## Pre-operative marking on the morning of your surgery



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### Immediate Post-operative period (just after your surgery)

Severe pain is unusual after breast surgery. Depending on your pain score, ward nurses will either give you an injection or pain relief in tablet form, ie (Paracetamol/Codeine/Brufen). Your wound will be closed with absorbable stitches, then sealed with glue and / or covered with a dressing.

Following your operation you may have a drain in place. This will usually be removed before you go home, however in some circumstances, patients may need to be discharged with a drain in place. The ward nurses will show you how to look after the drain. Clinic appointments will be made for the drain to be reviewed.

During your stay in hospital, you will be expected to do gentle exercises to avoid a stiff shoulder. Breast care nurses will provide you the written information about the exercises you will need to do. Clinic appointments are made one week after surgery to check your wound, and two weeks after surgery for the results of your operation.

### What to expect at home after surgery?

You will be allowed to take a shower as soon as you feel able to. **DO NOT soak in the bath.** If you go home with a drain in place, a small, clear dressing will be applied to the drain area. This should be left undisturbed until you come back to clinic.

You will return to clinic regularly until the drain is removed. These appointments will be arranged before you leave hospital. You are advised to sleep on your back for at least two to three weeks.

It is expected that you will feel tight and bruised and are advised to take pain relief either at regular intervals or as required depending upon the amount of pain you are experiencing. If you have excessive pain, swelling or bruising, contact the breast care nurses immediately during working hours, or contact the Ward during evenings and weekends. Phone numbers are provided at the back of this booklet.

## Two weeks post op



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### **What activities can I perform?**

It is recommended that you avoid heavy activities for at least three to four weeks, such as ironing, hoovering, driving and heavy lifting. You may do light activities such as washing-up, dusting and/or peeling vegetables.

### **What about post-operative exercise?**

Gentle exercise (raising your arm up to 90°) is advised for first two weeks and a full range of movements is expected to resume within four to five weeks in order to be ready if you need to have radiotherapy treatment. You will be advised by your consultant when you can start to increase your movement and exercises.

### **When can I start work?**

Returning to work will depend on several factors, such as the nature of your job and whether you require further treatments e.g. chemotherapy, radiotherapy, and whether you feel fully fit. Usually you will require at least two to three weeks off work and a bit longer if you have a strenuous job. If you have any concerns about this, please speak to your breast care nurse.

**It is important in your recovery to listen to your body and try to rest when you feel the need.**

### **How about sport and leisure activities?**

You may start swimming once you have regained good shoulder movement and the operation scar has fully healed (this is usually after six to eight weeks). If you are having radiotherapy, swimming is still permitted provided your skin is intact.

**You must shower thoroughly after you swim. If you have any irritation after swimming - STOP.**

Most other sports can be restarted after about three months, building up your tolerance slowly. If you are not sure then the breast care nurse or your surgeon will be able to advise you.

## Driving

We recommend that you do not drive for about three to four weeks after your surgery, or until you have full arm-movement (depending on the advice of the surgeon). You should feel fully confident before returning to driving. You need to be comfortable with all aspects of driving and be able to cope if you encounter an emergency situation. Keep journeys short, initially, building up your tolerance slowly. It is recommended that you check your insurance policy for clauses covering health and surgical operations.

## What about Psychological support?

Our breast care nurses are specially trained to counsel all our patients. They will support you from the time of your diagnosis, during the acute treatment and afterwards (Phone numbers are provided at the end of this booklet). If you need specialist input, they will refer you to a counsellor, or will ask your doctor to refer you to a psychologist or further agencies.

## Moving forward

If you find it difficult to return to your normal daily activities due to your diagnosis, please contact the breast care nurses who will be able to give you advice on support networks and courses available.

## Contact information

Breast Unit/Breast care nurses: 0121 507 4976

Ward: 0121 507 4017

## Further information

Cancer Research UK. (2020) *Surgery to remove breast cancer (breast conserving surgery)*. Available at: <https://www.cancerresearchuk.org/about-cancer/breast-cancer/treatment/surgery/breast-conserving-surgery-lumpectomy> (Accessed 20 October 2025).

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