LICAP (Lateral Intercostal Artery Perforator) flap reconstruction
Information for patients
The aim of this booklet is to give you some general information about your surgery. If you have any questions or concerns after reading it please discuss them with your breast care nurse practitioner or a member of staff at the Jane Ashley Centre. Telephone numbers are given at the end of this booklet.

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LICAP (Lateral Intercostal Artery Perforator) flap reconstruction

This type of operation is suitable for some patients who have their breast cancer in the outer part of the breast. The procedure aims at replacing the lost breast tissue (removed at the time of cancer surgery) with skin and fat. Therefore it can be referred to as a partial breast reconstruction.

Most women have spare tissue under the arms. This tissue can be used to reconstruct the space left in your breast after your tumour has been removed. There is no muscle removed in this operation, therefore there is no affect to your arm or chest wall function.

You will have quite a long scar on the side of your chest wall going towards your back. All the surgery on your breast, including lymph nodal surgery (if required) will be performed through the same scar. Therefore, there won’t be any scar on the breast (except in some cases where it may be necessary to remove the skin on the breast if the underlying cancer is close to the skin). The aim of this operation is to replace the tissue lost from your breast and to restore its size and shape. However, if you have radiotherapy after this surgery it may result in some overall shrinkage of one or both of your breasts. This shrinkage may make your breasts appear different to one another.

You will be offered counselling to help you with your cancer diagnosis and surgery and you will have the opportunity to view photographs of patients who have had this procedure. We can also arrange for you to meet up and talk to a patient who has recovered from this operation if you wish.
What happens on the day of surgery?

On the morning of your surgery, your surgeon will draw on you to show where the incisions (cuts) will be made and explain where you will have scars after the operation. She/he will use a piece of equipment called a hand-held Doppler to map out the underlying blood vessels which will supply blood to the flap/tissue being moved to fill the defect in your breast.

![Photo of a patient’s pre-operative skin marking – drawn on the morning of surgery](image)

Photographs are often taken before and after the operation for records and comparison. These will be from your neck down and will be anonymous. You will be asked to sign a consent form to show that you are happy for this to happen.
What are the benefits?

• The main benefit of surgery is that the cancer is removed from the breast.

• As long as an adequate rim of healthy tissue is achieved around the tumour, patients undergoing this type of breast conserving surgery do not need to lose their breast.

• Redundant ‘fatty’ tissue under the arms is used to reconstruct the space left in your breast after your tumour has been removed.

What are the risks?

All operations involve risks and benefits. You need to be aware of these so that you can make an informed choice about surgery. Your surgeon will talk with you in more detail if there are any individual risks in your particular case.

Before your admission

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

Risks associated with a LICAP flap reconstruction:

• Further surgery: It is important that all of the cancer is removed. You may need further surgery (5-10% risk) if we find that this surgery has not removed all of the cancer. If required, this will be discussed with you at your follow-up appointment two weeks after the surgery. Occasionally this may lead to a mastectomy, where the whole breast is removed.

• Pain: Breast surgery is not usually associated with severe pain but you will need some pain relief after the operation. Pain relief may be in the form of an injection and/or simple
painkillers like paracetamol and codeine; these are also usually effective enough to take when you go home. As this operation involves moving the breast tissue around, the pain/discomfort you feel may not be directly under the scar.

- **Infection:** All surgery carries a risk of developing an infection. This is rare but can be treated with antibiotics and/or dressings. The risk of infection is higher in smokers, diabetics and obese patients. If you feel unwell with a temperature, vomiting or notice significant redness of the skin on or around your breasts you should contact your GP or, if out of normal working hours, the emergency on-call service.

- **Bleeding/Bruising:** You are likely to be bruised after the surgery but this will settle down by itself after a few weeks. Very rarely further surgery may be needed if the bleeding persists or if there is a bigger collection of blood (haematoma).

- **Seroma:** Sometimes, after surgery, the wound continues to produce fluid under the scar and can cause swelling called **seroma**. It is quite a common problem following breast surgery and is not harmful in any way. A seroma can be drained if necessary by your breast care nurse practitioner.

- **Wound breakdown:** Some patients can have breakdown of the wound and the wound will open up. This leads to delay in wound healing but it will heal with the help of dressings. This is more common in smokers and people with large breasts or with thin skin.

- **Loss of sensation:** Numbness of the skin surrounding the scar and where the tissue has been repositioned (sometimes extending to the nipple) is common, although sensation returns in many patients. Some patients experience increased sensation which can last for 2-3 months. The extent of these changes in sensation will depend on the site and size of the cancer. If you are concerned by on-going loss of sensation talk to your breast care nurse practitioner and/or surgeon.

- **Flap failure/loss:** There is a small risk (1-2%) of the flap not
working due to damage to its blood supply. This would result in a need for further surgery.

- **Inability to proceed with the reconstruction:** During the operation there is a possibility that your surgeon will be unable to proceed with the reconstruction. This would happen if, for example, no suitable blood vessel is identified during the operation. In this case, the removal of your cancer will still go ahead. You may be offered alternative forms of reconstruction later to improve the appearance of your breast.

- **Scarring:** This operation will result in a relatively long scar (see photograph below) on the side of the chest wall going towards your back, most of which may be hidden by your bra. The scars will be most noticeable soon after the operation but should settle down with time. This may take up to a year or longer depending on how well you usually heal.

![Photo of a patient 15 days post-surgery](image)

- **Shoulder stiffness:** You are likely to experience some tightness after the surgery due to the scar tissue. This may have an affect on your shoulder movements temporarily. This does not usually last longer than 4 weeks. You should perform regular exercises to make sure your shoulder movement returns quickly. A physiotherapist will help advise you on which exercises you should do
• **Fat necrosis:** These are firm lump(s) in your breast which are due to scarring. They are not cancerous and can be assessed by mammogram and/or ultrasound, but may need to be biopsied to make sure they are not of any concern.

• **Deep vein thrombosis (DVT):** This is a blood clot that can form in a deep vein, usually within the leg. This can happen after any operation and general anaesthetic. The risk of getting a DVT is reduced by wearing special stockings and/or an anti-clotting injection which we would give to you. We advise you to move around soon after you are able to get out of bed following the operation and to stay active on your return to home.

### Preparing for admission to hospital

#### Pre-admission clinic
Preparing for admission can be an anxious time. To help reduce your anxiety we may ask you to attend a pre-admission clinic to ensure that you are as physically fit as possible. You will have the chance to talk with a breast care nurse practitioner about your diagnosis, surgery and any other concerns that you may have.

#### On admission
You will be admitted on the morning of your surgery and be likely to stay in hospital for 1-2 nights after which you will be discharged home.

#### Before surgery
You will not be allowed to eat for 6 hours before the anaesthetic (this includes not chewing gum), however you may sip water for up to 2 hours before the anaesthetic. Medication may be given 1 - 2 hours before your operation which can help to reduce discomfort and sickness.

A ward nurse will go with you to and from the theatre and the operation usually takes 1-2 hours. You will also spend up to an hour on the recovery ward immediately after surgery.
After surgery

On your return to the ward a nurse will regularly measure your pulse, blood pressure and check your dressings. You may have wound drains in place for a short time after your surgery. The nurses caring for you either in the hospital or community (a community nurse will be arranged should you go home with a drain) will be responsible for making the decision about when the drains can be removed.

The fear of experiencing pain after surgery is understandable. However severe discomfort is uncommon. The nurse will ask you about your pain and provide pain relief to meet your needs. It is advisable to have some paracetamol at home should you need it, however you will be given some pain relieving medication and advice before you are discharged.

It can also be common to feel worried about nausea and sickness but these side-effects are also uncommon. The nurse can provide anti sickness tablets to prevent this.

The wound is closed by dissolvable stitches under the skin with either surgical “glue” or paper “stitches” known as steri-strips to the skin.

The day after your operation you should feel more independent and you will be shown some gentle arm exercises to maintain your shoulder mobility. A ward nurse will give you an information booklet about these exercises to help you to remember what to do.

The scar may feel tight to start with but it tends to relax fairly quickly within a few weeks. We encourage you to do gentle exercises to ensure you regain complete range of shoulder movement within 1-2 weeks.

We recommend you wear a soft breast support (e.g. a vest) for the first week. You could then change to a soft non-wired bra for a further few weeks (3-4 weeks).
The wound may still be tender and it may be difficult for you to look at it at this stage. The ward nurses will cover the scar with a dressing until you feel ready to shower after surgery (usually by day two).

The typical stay in hospital is 1-2 days with a recovery period at home of approximately 3 - 4 weeks.

**General advice:** You will need to sleep on your back for two weeks. Driving is best avoided for the first 1-2 weeks and normal strenuous activities can be resumed after 4-6 weeks to allow wound healing. The swelling and bruising subside in a few weeks but it can take 6-12 months for the scars and shape of the breasts to settle.

**Employment**
If you work you will need to let your employer know how much time you need off work. Normally it is advised that you take 3-4 weeks off work, which includes the week of your operation. If your job is particularly strenuous you may need longer off work. Please discuss this with your breast care nurse practitioner or a ward nurse. If you need a medical certificate for your employer the ward staff can provide you with one that covers the duration of your stay in hospital and the expected recovery time at home.

**Caring responsibilities**
If you have responsibility for the care of someone and are anxious about this, it can be helpful to talk with your GP or breast care nurse practitioner. They may be able to offer suggestions for help both during and after your admission. Whilst you will be able to look after yourself on discharge home you may need help initially if you care for someone else.

**Living alone**
If you live alone you may be concerned about how you will cope after your surgery. Most people are able to manage at home. For example you will be able to wash, dress, cook and do light household tasks for yourself. It might be advisable to make some
arrangements for help with shopping or any heavier tasks for the first week or two.

**Follow up**

Usually, your surgeon will see you in the outpatients’ clinic two weeks after surgery to discuss the results of your operation. The appointment date and time will either be given to you before you go home or posted to you.

**Support**

This can be a frightening time, particularly as you may have had few symptoms and this might be your first time in hospital. There are various people who specialise in the diagnosis and treatment of breast cancer that are available to give you support.

A breast care nurse practitioner is a senior nurse who has undertaken additional training to help you when a diagnosis of breast cancer is made. You will be given the name and contact details of a breast care nurse practitioner who will be your ‘keyworker’ and the main point of contact for any concerns you might have. She can support you from the time you attend the breast clinic, through to diagnosis and afterwards if you need any further treatment. She works closely with the breast surgeon and other doctors and health care professionals involved in your care.

**She can provide:**

- information about your diagnosis and its treatments
- advice on financial and social support
- help with practical problems. This includes advice about body shape, clothing, wound care, skin care and pain relief.
- emotional support.
Long-term outlook

Most women are pleased with the results of their surgery. The shape of your breasts will change with time, particularly with changes in bodyweight, ageing, and pregnancy. The results of this surgery will alter as you get older in the same way natural breast shape changes as we age.

Contact information

• Breast Care Nurse Practitioners
  Oxford  01865 235 773
  Banbury  01295 224 196

• Secretaries to Consultant Breast Surgeons
  Oxford  01865 220 935
  01865 220 932

• Jane Ashley Centre
  01865 235 350

If you need an interpreter or need a document in another language, large print, Braille or audio version, please call **01865 221473** or email **PALSJR@ouh.nhs.uk**