

Patient information leaflet Problems with the lymphatic system following gynaecological surgery

Introduction

This leaflet has been produced to give you general information about problems that can occur with the lymphatic system after gynaecological surgery. These problems can include **lymphoedema and lymphocysts**.

What is the lymphatic system?

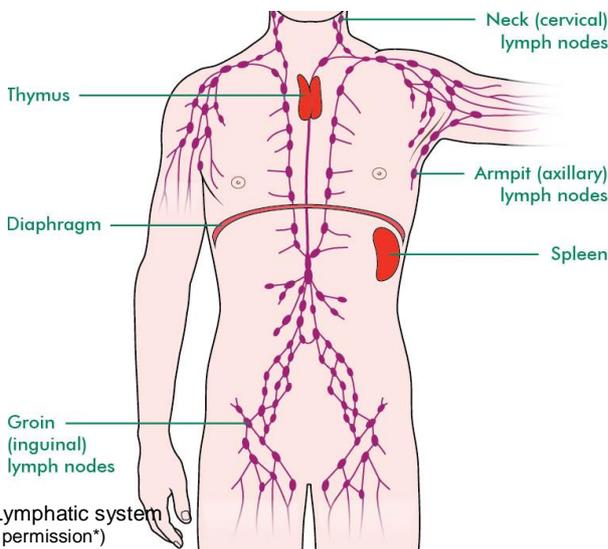
The lymphatic system is made up of both a network of tiny vessels underneath the skin and many glands positioned next to the major blood vessels. Together, these form part of the body's immune system. They work to cleanse the body's tissues and drain away the clear fluid that accumulates under the skin, called **lymph**.

The **lymph glands** collect the lymph fluid and re-distribute it back into your blood vessels. These glands can also drain and collect cancer cells, which spread from your original cancer site.

For example:

- Uterine, cervical and ovarian cancer can spread cancer cells to lymph glands in your pelvis (pelvic lymph glands) and the middle of your abdomen (para-aortic lymph glands),
- Vulval cancer can spread cancer cells to lymph glands in your groin (inguinal lymph glands).

What causes problems with the lymphatic system?



Problems can occur when parts of the lymphatic system become blocked or have to be removed. The lymph fluid, which usually drains through the lymphatic vessels, accumulates in the surrounding tissues, and is unable to flow back into the blood vessels. The blockage can occur because of cancer cells growing in the glands, or because the lymph glands have to be removed as part of the treatment for cancer (lymphadenectomy), or occasionally following radiotherapy.

Figure 1. Lymphatic system (with permission*)

What is lymphoedema?

Lymphoedema is the accumulation of fluid in the tissues. This can affect any part of the body, but in gynaecological cancer cases, this usually occurs in the legs.

The swelling may come and go initially and may be worse during the day but better at night. Without treatment, it can become more severe and persistent. Lymphoedema itself is harmless but can be very distressing.

Symptoms include:

- An aching, heavy feeling
- Swelling of the limb
- Difficulty moving the limb
- Repeated skin infections
- Hard, tight skin
- Fluid leak through the skin
- Difficulty fitting into clothes/jewellery/shoes.

What is a lymphocyst?

A lymphocyst is a collection of lymph fluid, which accumulates in a confined space within the groin or abdomen. These can occur in the sites where lymph nodes have been removed during surgery. Often, they do not cause any symptoms and are only identified on examination or during imaging investigations.

Symptoms that can occur are often related to compression by the fluid collection of neighbouring structures. These include:

- abdominal/pelvic pain or fullness
- swelling of the surrounding tissues
- urinary frequency
- constipation.

Who can be affected?

All gynaecological procedures that require removal of lymph nodes have a risk of causing lymphatic problems. The removal of lymph nodes is called **lymphadenectomy**.

These operations are:

- pelvic lymphadenectomy
 - for endometrial, ovarian or cervical cancer
 - this removes nodes from the blood vessels in the pelvis
- para-aortic lymphadenectomy
 - for endometrial, ovarian or cervical cancer
 - this removes nodes from the main blood vessels in the abdomen (aorta and vena cava)
- inguinal lymphadenectomy
 - for vulval cancer
 - this removes nodes from in the groins

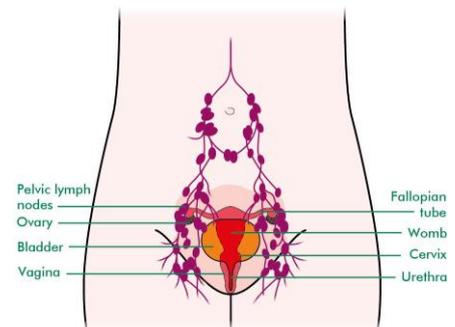


Figure 2. Female pelvic lymphatic system (with permission*)

Unfortunately, it is difficult for your surgeon to identify which patients are more at risk of developing lymphatic problems post-operatively.

What can your surgeon do to try to reduce the chance of you developing lymphoedema?

“Sentinel lymph node” procedures are done whenever possible. This is when a smaller number of nodes are removed. The surgeons identify the first few lymph nodes that the cancer would be draining to and remove only them. By removing fewer nodes, the chance of developing lymphoedema is reduced. However, sometimes patients require a second operation if these lymph nodes are found to contain cancer cells. “Sentinel lymph node” procedures are only done in some specific settings depending on the type of cancer, stage of cancer etc.

What can I do to reduce the severity of lymphoedema if it does occur?

If lymphoedema does occur, the skin on your legs can become very fragile. There are various things you can do to try to protect yourself, or reduce the chance of it worsening.

- Skin care:
 - take care of your skin: avoid knocks, sunburn and insect bites
 - take care when cutting nails: use clippers or see a chiropodist if you struggle
 - always wear footwear outside
 - observe your toes for athlete's foot (e.g. redness, skin peeling between the toes) and contact a pharmacist for treatment
 - use a moisturizer to keep your skin supple
 - use an electric razor for hair removal rather than wax, cream or razors
 - if any redness or infection develops on your feet or legs, seek medical attention.
- Travel:
 - if you are travelling on a long journey by car/coach/train/air, wear support stockings
- Injections:
 - avoid injections into your thighs or legs
- Clothing:
 - your clothing, including underwear, should be loose around your waist and thighs, and when removed should not leave redness or indentations in your skin.
- Regular measuring:
 - self-measuring of your legs (about every month) will alert you to early swelling. The pre-operative nurses often take measurements prior to your surgery and can show you how to monitor this for yourself.

Diagnosis

If you notice an increase in leg size, leg swelling or pain, it is important you contact the gynaecology oncology specialist nurses, or your GP, or mention it to your surgeon during your follow-up appointments at the hospital. **The earlier a diagnosis is made, the easier it is to treat.** They will then ensure you are referred to the local Norfolk Lymphoedema Service for further assessment and treatment.

Treating lymphatic problems

There is no cure for lymphoedema, but it's usually possible to control the main symptoms using techniques to minimize fluid build-up and stimulate the flow of fluid through the lymphatic system. These include:

- wearing compression garments (available from the lymphoedema clinic or on prescription from your general practitioner)
- specialised massage techniques
- taking sensible preventative precautions (see above)

When should I seek medical attention urgently?

Sometimes the lymphatic fluid build-up can become infected, resulting in worsening pain, a raised temperature (fever), and redness/swelling/heat in the affected area. This is called **cellulitis**. Antibiotics taken by mouth (orally) can treat cellulitis, but occasionally severe cases require treatment in hospital with intravenous (IV) antibiotics.

Psychological impact

Living with a long-term condition that affects your appearance can cause great distress and lead to a low mood or depression. If this is the case, talk to your GP or your gynaecological cancer specialist nurse. There are national lymphoedema support groups that can provide information and advice and put you in touch with people in your area.

If you have any problems after the operation use the contact details below:

- Please phone the Gynae-Oncology Nurse Specialists on 01603 287742 (Monday to Friday 08.30 – 17.00).

*All diagrams are taken from the MacMillan Cancer UK website, with permission.

<https://www.macmillan.org.uk/information-and-support/vulva-cancer/understanding-cancer/vulva-lymphatic-system.html>

