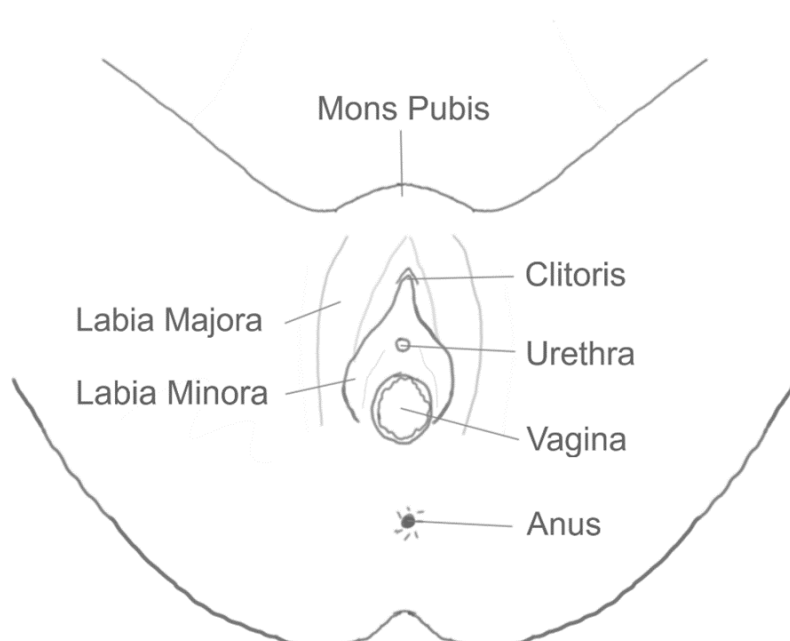


Surgery for vulval cancer

What is the vulva?

The vulva is made up of all the visible female sex organs on the outside of the body. It includes:

- The entrance to the vagina (birth canal)
- The opening of the urethra (the tube that drains urine from the bladder)
- Labia minora – 2 delicate skin folds that lie either side of the entrance to the vagina and opening of urethra
- Labia majora – 2 larger folds of hair covered skin that lie outside the labia minora
- Clitoris – a small area of very sensitive tissue that lies where the labia minora join at the front of the vulva and helps with sexual arousal and climax (orgasm)
- Mons pubis – an area of fatty tissue and hair covered skin in front of the vulva, which lies over the pubic bone (bone at the front of the pelvis)
- Perineum – the area of skin at the back of the vulva that sits between the entrance to the vagina and the anus (back passage)



What is cancer?

All the organs and tissues in the body are made up of cells. Cells normally copy themselves to multiply and replace old cells that become damaged in a controlled way – this is how the body heals itself. Once the damage has been repaired the cells stop multiplying. In cancer, cells become abnormal and start to multiply out of control, making more and more abnormal cells. These grow into a lump or lesion known as a tumour. Cancer can be diagnosed by taking a sample of the lump (a biopsy) and looking at the cells under a microscope to see if there are any cancer cells.

Not all tumours are cancerous (malignant), some are benign (not containing any cancer cells). Benign tumours cannot spread to other parts of the body, but cancers can grow into the surrounding normal tissue (local invasion) and spread to other parts of the body (metastasis). Spread of cancer tends to go through the lymphatic system. The lymphatic system is a network of thin tubes and glands (called lymph nodes) throughout the body that drain fluid and waste from around the body helping the body to fight infection and disease. The lymphatic drainage from the vulva first goes to the lymph nodes (glands) in the groins (the area where the legs meet the body in front of the hip) so if cancer spreads from the vulva it tends to affect the groin lymph nodes first.

Diagnosing vulval cancer

Vulval cancer is diagnosed by removing a sample of tissue, which is then examined by a histopathologist (doctor who diagnoses disease in tissues/organs) under a microscope in a laboratory. This may be taken as a small piece of tissue from the area of concern, which is often done in clinic under local anaesthetic, or as an excision biopsy (where the whole lump is removed along with a border of healthy tissue).

A CT or MRI scan may be done to check for spread to other areas of the body.

Grades of cancer:

Some types of cancer are given a “grade” by the histopathologist, which describes how abnormal the cells are and how fast they are growing.

- Grade 1 or “well-differentiated” cancer cells look close to normal and are usually slow growing
- Grade 2 or “moderately-differentiated” cancer cells look more abnormal and grow a bit faster than grade 1
- Grade 3 or “poorly-differentiated” cancer cells look very different to normal and are more likely to grow or spread faster

Stages of vulval cancer

Cancers are “staged” depending on how big they are and whether they have spread to other parts of the body – this can be assessed by a combination of examination, scans, and histopathology results. There are 4 main stages of vulval cancer. Stages 1 and 2 may be called early stage and stages 3 and 4 cancers may be called advanced stage cancers.

- **Stage 1** – The cancer is only in the vulva and has not spread to the lymph nodes
 - Stage 1A – the cancer is up to 2cm size and has invaded up to 1mm deep into the skin
 - Stage 1B – the cancer is more than 2cm size OR has invaded more than 1mm deep into the skin
- **Stage 2** – The cancer can be any size and has spread to nearby areas including the lower part of the urethra or vagina, or the anus but has not spread to the lymph nodes
- **Stage 3** – The cancer has spread to the lymph nodes in the groin
 - Stage 3A – The cancer has spread to one or two lymph nodes that are under 5mm size OR to one lymph node that is 5mm or bigger
 - Stage 3B – The cancer has spread to three or more lymph nodes under 5mm size OR to two or more lymph nodes that are 5mm or bigger
 - Stage 3C – The cancer has spread to any number of lymph nodes AND it has spread outside the containing wall of the lymph node
- **Stage 4** – The cancer has spread into other nearby or distant tissues or organs
 - Stage 4A – The cancer has spread to or invaded:
 1. the upper part of the urethra AND/OR the upper vagina, the bladder, the rectum (back passage), or is attached to bone in the pelvis
 2. lymph nodes in the groin that have become fixed (can't be moved) or have formed an ulcer
- **Stage 4B** – The cancer has spread to:
 - Lymph nodes inside the pelvis or further away
 - Other parts of the body that are further away from the vulva (for example, lungs)

Treatment for vulval cancer

The recommended treatment for vulval cancer varies depending on the stage and cancer type. Your diagnosis and treatment will normally be discussed by a group of specialists in gynaecological cancers known as the multi-disciplinary team or “MDT”. The MDT includes specialists in gynaecological cancer treatments and investigations including surgery, chemotherapy (drug treatments), radiotherapy (treatment using X-rays), radiology (scans), and histopathology (examination of tissue under the microscope) as well as clinical nurse specialists (CNS), who will support you through your investigation and treatment. The MDT will make recommendations about your investigation and treatment, which will be explained to you in clinic by one of the cancer doctors who, along with a CNS, will support you to make decisions about your care.

Surgery for Vulval Cancer

Surgery to the Vulva

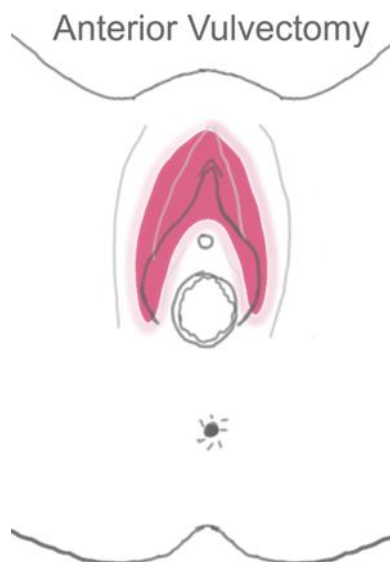
Wide Local Excision (WLE)

Wide local excision (WLE) is an operation to remove smaller cancers along with a border of healthy tissue. The aim is to have “clear margins” (no cancer at the edges of the removed tissue) to ensure all the cancer has been removed and to reduce the risk of it coming back or spreading. If there is cancer at the edges of the removed tissue further treatment may be needed (usually a further operation to remove more tissue).



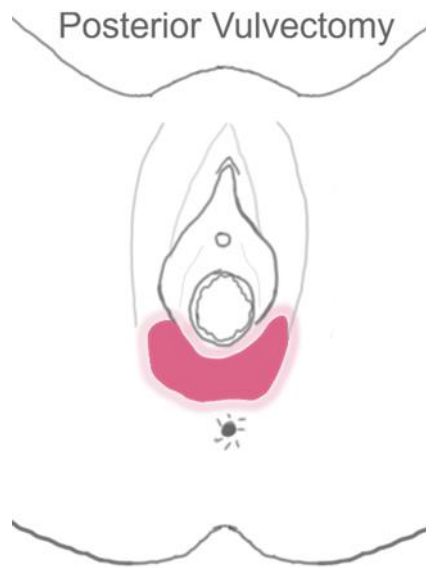
Partial Vulvectomy

For larger cancers more of the vulva needs to be removed. Cancers in the front part of the vulva may require removal of most of the front half of the vulva (this is called an anterior vulvectomy/hemivulvectomy). If the cancer is close to the clitoris, then it may be necessary to remove part, or all, of the clitoris, which can affect sexual function. If the cancer is close to the urethra, it may be necessary to remove a small amount of the lower end of it, this doesn't usually affect continence (being able to control when you pass urine). Wounds in the front part of the vulva are usually easily closed with stitches.



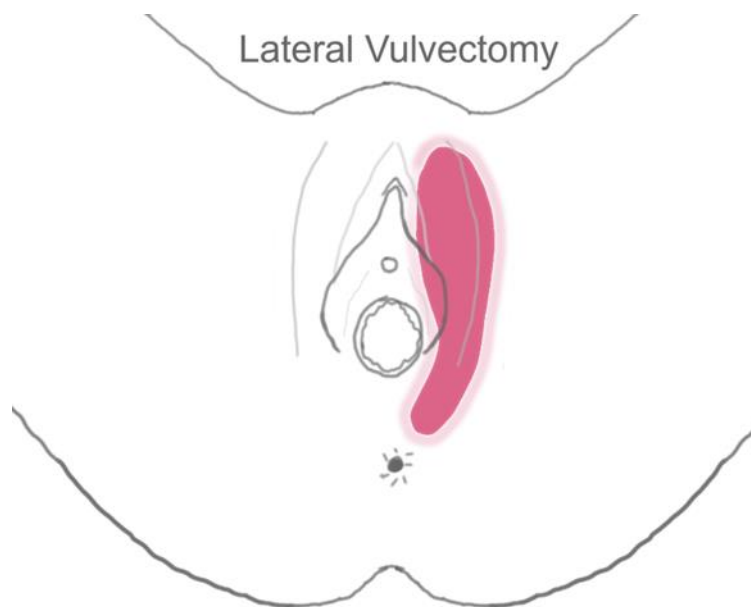
Posterior Vulvectomy

Cancers in the back part of the vulva usually need removal of the back half of the vulva (this is called a posterior vulvectomy/hemivulvectomy). Care is taken to avoid damaging the muscle around the opening of the back passage (anal sphincter), which is important for controlling when you have your bowels open. If your cancer is very close to the anus your gynaecological cancer surgeon will discuss options with you, this may sometimes include surgery to the rectum (back passage) and involve the colorectal (bowel) surgeons, as a stoma (where the end of the bowel is brought out onto the tummy and poo is collected in a bag that sticks onto the surface of the tummy) may be needed. A specialist stoma nurse would support you in learning how to look after your stoma if this was needed.



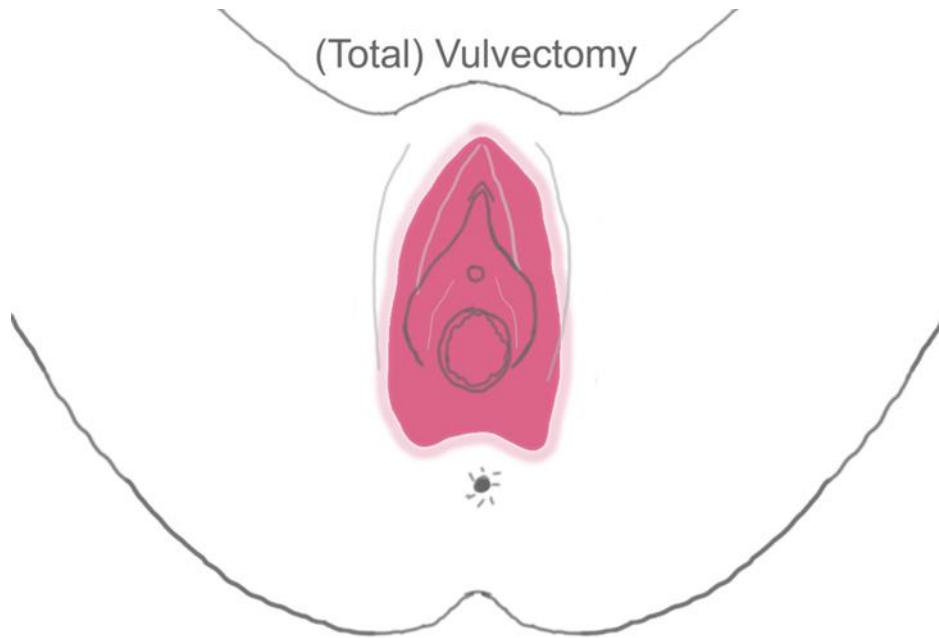
Lateral Vulvectomy

Cancers that are on one side only may be removed by removing that side of the vulva (this is called a lateral vulvectomy/hemivulvectomy). This usually does not involve the clitoris or urethra.



Total/Radical Vulvectomy

Large cancers and cancers that are in several different places on the vulva may need an operation to remove the whole vulva, including the inner and outer labia and the clitoris. Care is taken to avoid damaging the urethra and the anus, and the vagina will be left open.



Reconstructing the Vulva

Wounds from WLE and anterior or lateral vulvectomy operations are usually straightforward to close with dissolvable stitches.

Larger wounds and those in the back part of the vulva (where there is less skin) may not be possible to close easily with stitches without putting too much tension on the wound (which increases the risk of the wound breaking down). These wounds are therefore often closed with plastic surgery reconstructive techniques called skin flaps (where a section of skin next to the wound is moved to close the gap with less tension, whilst keeping the same blood supply). This surgery is often performed jointly with plastic surgeons. Sometimes skin grafts may be used, where a thin piece of skin is taken from another area to cover the wound where the cancer has been removed from. Less often it may be appropriate to allow the wound to heal from the base up without closing it (this is called healing by secondary intention).

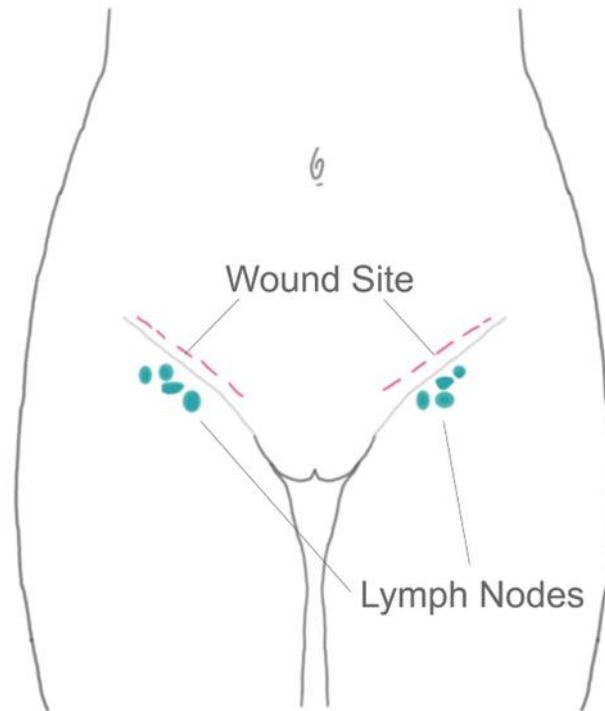
Surgery to the Lymph Nodes

For the smallest stage 1A vulval cancers, surgery for the lymph nodes is not usually needed as the risk of the cancer spreading is low.

For most vulval cancers, surgery to remove some or all lymph nodes from one or both groins is usually recommended.

Sentinel Lymph Node Biopsy

For smaller cancers that are in one place on the vulva, not too close to the urethra, vagina or anus, and where there is no sign of spread to the lymph nodes on scan it may be possible to do a sentinel lymph node biopsy. This is where a dye is injected into the cancer in the operating theatre and only the lymph node(s) that the dye highlights are removed through a cut in the groin(s). If there is no sign of cancer in these “sentinel” lymph nodes, then the rest of the lymph nodes do not need to be removed. Sentinel Node Biopsy is done at the same time as surgery to remove the vulval cancer.



Groin Lymphadenectomy

For larger cancers, cancers that are in more than one place on the vulva or involving the urethra, vagina or anus, or where there is suspicion of spread of the cancer to the lymph nodes on scan full groin lymphadenectomy (removal of all the lymph nodes in the groin) is usually recommended. This operation may be done at the same time as surgery to remove the vulval cancer, or at a later date. Removing all the lymph nodes increases the risk of fluid collecting in the groin after surgery, which may need draining (called a lymphocyst) and, longer-term, problems with fluid swelling in the leg due to the normal fluid drainage from the leg being disrupted (called lymphoedema). The latest audit data from Liverpool Women’s (from 2019) shows around 4 in every 10 women who have groin lymphadenectomy develop a lymphocyst after the surgery.

What to expect after surgery

Vulval surgery may be done under a general anaesthetic (where you are asleep) or under a regional anaesthetic (where anaesthetic is injected into your back to make you numb from the chest down). Your anaesthetic doctor will discuss with you the best option for your surgery. You will be given painkillers while you are on the ward to keep you comfortable. It

is a good idea to make sure you have some of your usual painkillers at home to help you stay comfortable after you leave hospital.

It is not possible to stick dressings onto the vulva as would be done for wounds on other parts of the body, a non-stick piece of gauze may be placed over the wound temporarily following surgery.

You will likely also have a catheter (flexible tube) placed into your bladder through the urethra to drain urine temporarily following the surgery. If you have had regional anaesthetic you may have a catheter until you are able to mobilise independently, however, if the surgery involved the urethra or close to the urethra then a catheter may be required for a longer period to allow time for the healing process.

If you have had groin lymphadenectomy you will have a drain in each groin that has been operated on and a dressing on the wounds. This is a flexible tube that is passed through the skin in the groin and is attached to a suction bottle outside the body to draw out excess fluid. Drains are usually kept in for a few days until fluid stops draining into them. Occasionally, you may be discharged home with these in place and an appointment will be made for you to return to have these removed.

You may be recommended to have a course of antibiotics following surgery to prevent or treat infection (this may be through a drip or tablets that you take by mouth). Antibiotic douches are sometimes used, where antibiotics are used to wash the vulva 3 times a day for a few days after surgery, with the aim to reduce the risk of infection.

You will normally be given compression stockings to wear and a course of blood thinning injections for 4 weeks after the operation to reduce the risk of developing blood clots in the legs (deep vein thrombosis (DVT)) or on the lungs (pulmonary embolism (PE)).

You will be followed up with the results of your histopathology usually around 3 weeks after surgery. Your doctor will explain the results to you and if any further treatment has been recommended by the MDT. Further treatment might include another operation, radiotherapy (using X-rays to destroy cancer cells), or chemoradiotherapy (a combination of radiotherapy and chemotherapy (anti-cancer drugs)).

What you can do to help your recovery

Keep wounds clean and dry. We encourage gentle rinsing using a jug of lukewarm water, slowly pour the contents over the wound area. You may need to repeat this a few times. Alternatively, you may use a shower head gently while standing in the bath or the shower, or even while sitting on the toilet.

Keeping the wound area clean and dry after using the toilet is important in order to prevent infection. If you are not at home, you can use a water-filled squeeze bottle and some clean gauze in your handbag for when you need to use public toilets.

Dry the area carefully using a hairdryer on a cool setting. If you prefer not to use a hairdryer, you may dab gently with clean, soft gauze (this can be bought from a chemist.) or clean soft towel. Avoid rubbing the area as this may cause discomfort and irritation. The area should be dry before you get dressed.

When you are at home, try to expose the area to air as much as possible. This can be done by not wearing underwear for short periods of time or overnight. We recommend wearing loose-fitting cotton clothing, avoiding close fitting clothing like tights, cycling shorts, leggings and tight jeans.

We suggest avoiding traditional soaps, talc, wipes, creams and perfumed products which may cause irritation and alternatively use a soap substitute such as dermol or hydramol.

Stop smoking, ideally before the operation. Smoking greatly increases the risk of infection and wound breakdown as the chemicals released into the blood from smoking interfere with the body's natural healing process. Smoking also greatly increases the risk of blood clots (DVT and PE). Stopping smoking will help to reduce these risks. The latest audit data from Liverpool Women's (from 2019) showed around 3 to 4 in every 10 women who are smokers suffered wound breakdown compared to only 1 in 10 for non-smokers. Support and advice is available to help you stop smoking. This will be offered at your pre-operative assessment.

Seek help if you notice any signs of infection signs of infection include, the wound becomes hot, red, swollen or if there is pus coming out of it, or if you have a fever or feel unwell. You can contact your CNS, GP, or attend the hospital emergency department. For medical advice call 111, in an emergency call 999.

Avoid sitting on your bottom while the wounds are healing, especially if you have had skin flaps. (Sitting puts pressure on the wounds and decreases the blood flow to the area, which can cause problems with healing.)

Take things easy after surgery. It's good to keep mobile as it reduces the risk of blood clots but avoid long walks, strenuous exercise and heavy lifting for 6 weeks after major surgery. You will not usually be able to drive for around 6 weeks if you have had major surgery – tell your insurer and check that you are covered before you start driving again.

You will usually need to avoid having penetrative intercourse for at least 6 weeks after surgery to allow your wound to heal (although this varies from person to person and depends on the extent of surgery). Scar tissue can sometimes cause tightening around the vagina, which can make sex more difficult or uncomfortable. Tell your doctor or CNS if you are experiencing problems as they will be able to advise on how to help with this.

Other sources of information:

<https://www.macmillan.org.uk/cancer-information-and-support/vulval-cancer>

<https://www.macmillan.org.uk/cancer-information-and-support/treatments-and-drugs/surgery-for-vulval-cancer>

<https://www.macmillan.org.uk/cancer-information-and-support/vulval-cancer/treatment>

<https://www.macmillan.org.uk/cancer-information-and-support/impacts-of-cancer/lymphoedema>

<https://www.macmillan.org.uk/cancer-information-and-support/after-treatment>

<https://www.macmillan.org.uk/cancer-information-and-support/impacts-of-cancer/sex-and-cancer>

This leaflet can be made available in different formats on request. If you would like to make any suggestions or comments about the content of this leaflet, then please contact the Patient Experience Team on 0151 702 4353 or by email at pals@lwh.nhs.uk

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