Introduction

Vulval cancer is uncommon, with around 1000 new cases diagnosed each year in the United Kingdom.

The outlook for the majority of patients with vulval cancer is very good. Treatment is planned individually for each patient with vulval cancer and the basis of treatment is surgery.

For some patients a small biopsy taken in the clinic under local anaesthetic can confirm the diagnosis of vulval cancer, but for other patients your consultant may suggest an operation under a general anaesthetic to make the diagnosis.

Your consultant will explain the choice of biopsy to confirm the diagnosis to you in the clinic, but features such as the size and site of the suspected cancer can affect the decision.

Surgery for vulval cancer can involve both the vulval skin and the groin area that contains the lymph glands that are connected to the vulval skin.

Such surgery can be major, and has a risk of complications and side effects that can become apparent both during your stay in hospital and once you return home. These risks are described more fully in the section marked 'possible risks', and will be discussed fully with you by the consultant.

What is vulval surgery?

The type of surgery used to remove cancerous or pre-cancerous areas depends on the size of the area and where it is situated on the vulva. These are described below.

Wide Local Excision

If the suspected cancer is small (less than 2cm in diameter), then it may be possible to remove the cancer with a 1cm area of normal tissue around it. The area removed will then be sent to the laboratory for tests. The results of these tests will tell the consultant whether any further surgery will be required. The results of the tests will be discussed with you at your next out patient clinic appointment.

Sometimes the results show that the cancer has been completely removed and that there is a very small risk that cancer cells have travelled to the groin lymph glands. In this situation you will be followed up in clinic to make sure that there are no signs of further cancerous changes developing.

Sometimes the results show that further treatment is required. Often this involves removing the lymph glands in the groin area and can also include removing a further area of vulval skin in order to make sure that no cancerous areas remain.

Wide Local Excision or Partial vulvectomy with sentinel lymph node biopsy

If the cancer on biopsy is more than 1mm deep (thick) we recommend sampling the ‘sentinel’ lymph node in either one or both groins. A radioactive liquid is injected into the area of skin to be removed in the morning of the operation, and a blue dye is then also injected when you are asleep. This will highlight the main or first lymph node that the cancer is draining to in the groin which means one or two lymph nodes
can be removed instead of all the lymph nodes in the groin. This procedure is performed at the same time as having the abnormal skin removed, which in small cancers usually involves removing part, but not all of the vulva.

Inguinofemoral lymphadenectomy

If the cancer on the skin is more than 4 cm, or if the sentinel lymph node contains cancer cells your surgeon will recommend an operation to remove the lymph glands from the groin through an incision along the groin skin crease. Sometimes the operation only needs to be performed on one groin (unilateral), and sometimes on both sides (bilateral). Drains are inserted into the wounds at the time of surgery to prevent lymph fluid collecting under the scars. Your consultant will discuss this with you in detail as this varies from patient to patient.

Vulvectomy

If the cancer on the skin is more than 4cm in size the majority of the vulval skin may need to be removed. This can require the clitoris and skin near the urethra (entrance to the bladder) and anus to be removed. Your consultant will explain the exact areas of skin that will need to be removed in your case. If you are worried about how the vulva will look and feel afterwards, please ask your consultant or specialist nurse, and they can arrange extra support if you need it.

What will happen before my operation?

You will be asked to attend pre-admission clinic. At your clinic visit the nurse will take your medical details and perform a general medical examination. Blood and sometimes other tests are carried out or arranged if these have not already been performed. These may include a chest x-ray or a CT scan of your chest and abdomen, and an ECG (heart trace). During this time, you will have the opportunity to discuss the planned operation and what it is likely to entail.

Admission day

Your stay with us will be discussed before admission - this can range from a few days to 2-3 weeks.

The measuring of support stockings, which improve the circulation of blood in your legs, will also be carried out, and you will be given heparin injections after your operation. Both of these help in preventing blood clots forming. You may have heard of this being called deep vein thrombosis.

You will be told about the approximate time you will be going to theatre, and when to stop eating and drinking (fasting).

The anaesthetist will see you prior to your operation and will ask you about yourself. They will also discuss the options for post-operative pain relief. These may include the use of a spinal or epidural anaesthetic.

If you are having sentinel lymph node biopsies you will have an injection into the area of skin where the cancer is. This is done in the radiology department on the day of surgery before you go to the operating theatre. A numbing cream will be applied to the skin before the injection. A nurse from the ward goes to the theatre with you. She will stay with you in the anaesthetic room until you are asleep and moved into the operating theatre.

After the operation

You will be woken up by the anaesthetist after your operation is completely finished. You then go into the recovery room; there you will be regularly checked by the nursing teams until you are sufficiently awake and recovered to return to the ward.

Regular checks will be carried out on your return to the ward, which will include monitoring your pulse and blood pressure. The nurse will also check that your pain is being controlled.
There will be a fluid ‘drip’ going through a plastic tube into your arm. You will also have a ‘catheter tube’ going into your bladder. The catheter will empty your bladder.

You may also have drains (plastic tubes and bottles) coming out of your groin area. These drain any excess fluid in your groin area if your lymph nodes have been removed.

A doctor will check your progress – usually on a daily basis. It is often possible to remove your drip within the first two days and for you to start drinking on the first day after the operation. Eating is usually possible on the first day.

The catheter will be removed when you are mobile enough and on the doctor’s instruction. The drains will be removed when the drainage of fluid has reduced significantly. This can sometimes take many days to weeks. We will often send you home with district nurse support if the drains are still needed but you are otherwise well enough to be at home.

**Wound care**

From day 2 after your operation, your wound will be cleaned twice a day by the nurse. This is called swabbing; the wound is swabbed with warmed sterile saline to keep the area clean. The nurse will also swab the area after you have had your bowels opened, to remove any bacteria.

The stitches used will normally dissolve in a few weeks following the operation.

You will be encouraged to use the shower once you are mobile enough. This helps to keep the area clean. You should not rub the wounds with a towel but instead pat them dry or use a hairdryer on a cool setting.

A follow-up appointment will be sent to you. At this appointment, your surgery results will determine whether any further treatment is required. This will be approximately 2-6 weeks after your discharge. You may be asked to attend the ward sooner so that we can check your wound. This appointment is normally at the joint gynae/oncology clinic – a clinic for patients who have had cancer treatment. It is run by the gynaecologist and oncology/radiotherapy consultants. Your invitation may have the name of the oncologist/radiotherapist on it – this does not always mean that you will need this form of treatment.

**Possible risks**

All operations carry risks of complications. Vulval surgery carries risks that are common to all major cancer operations but also risks which occur more often with this type of surgery.

**Infection**

Following vulval surgery infections of the chest, urinary tract or wound can occur. Wound infections following vulval surgery are common and may occur in up to half of patients. Whilst this may only be a reddening of the wounds that responds quickly to antibiotics, infections can cause the wounds to open (called wound breakdown). In this situation the wound (be it on the vulva or in the groin area) will take longer to heal, although usually this does not mean that you have to stay in hospital – district nurses are experienced in helping these wounds to heal in the community.

**Deep vein thrombosis (DVT) and pulmonary embolism (PE)**

Blood clots can form in the veins in the legs following major surgery. This is known as a deep vein thrombosis. Rarely, the clot can travel to the lungs and this is known as a pulmonary embolism.

Pulmonary emboli can be fatal. To try and reduce the risk of DVT and PE, we give a blood thinning injection each day that you are in hospital, compression stockings that help the blood to keep flowing normally through the legs, and we encourage you to move your feet up and down regularly whilst you are in bed.
Bleeding
Rarely bleeding can occur during major procedures that requires a blood transfusion.

Lymphocysts
If the lymph glands are removed from the groin, then collections of lymph fluid can form under the scar. While the drains are still collecting fluid after the operation your team will recommend that they stay in, and women are normally discharged home with the drains still in, with regular district nurse review. However, a persistent collection of fluid in the groin (lymphocyst) can happen in around one fifth of patients, and often these resolve if left for a few months following the operation. Occasionally your consultant may recommend drainage of the cysts with a fine needle, or rarely another operation.

Lymphoedema
Lymphoedema in the leg is a condition which can follow removal of the groin lymph glands in up to one third of patients. The condition describes swelling of the leg due to the lymph fluid not draining out of the leg very well after the groin lymph glands have been removed. Lymphoedema is rare if only sentinel lymph nodes are removed.