



TURT

TOTAL  
LAPAROSCOPIC  
RADICAL  
TRACHELECTOMY

# Introduction

This information sheet has been provided to help answer some of the questions you may have about total laparoscopic radical trachelectomy.

## WHAT IS A RADICAL TRACHELECTOMY?

Radical trachelectomy is the surgical removal of the neck of the womb (cervix), some of its surrounding tissue, top of the vagina and the lymph glands from the pelvis. It is a surgical technique that is carried out on women who wish to preserve their fertility following the diagnosis of early stage cervical cancer. The conventional treatment for early stage cancer of the cervix is a radical hysterectomy, where the cervix (neck of womb), uterus (womb), top of the vagina and the tissues around the cervix and pelvic lymph glands (nodes) are removed.

However, radical trachelectomy aims to preserve fertility for women with early stage cancer of the cervix and can be performed using one of the following three methods:

### Radical abdominal trachelectomy (RAT)

This is an 'open' operation where a lower transverse or midline incision (cut) is made on 2 your tummy. The procedure involves the surgical removal of the cervix (neck of the womb), a small part of the vagina, the tissue surrounding the cervix (parametrium) and the pelvic lymph nodes (lymph glands in this area). This procedure can be offered to women who have early stage cancers of the cervix. The abdominal operation is similar to an 'open' radical hysterectomy, except that with a radical abdominal trachelectomy the uterus (womb) is preserved.

### Radical vaginal trachelectomy (RVT)

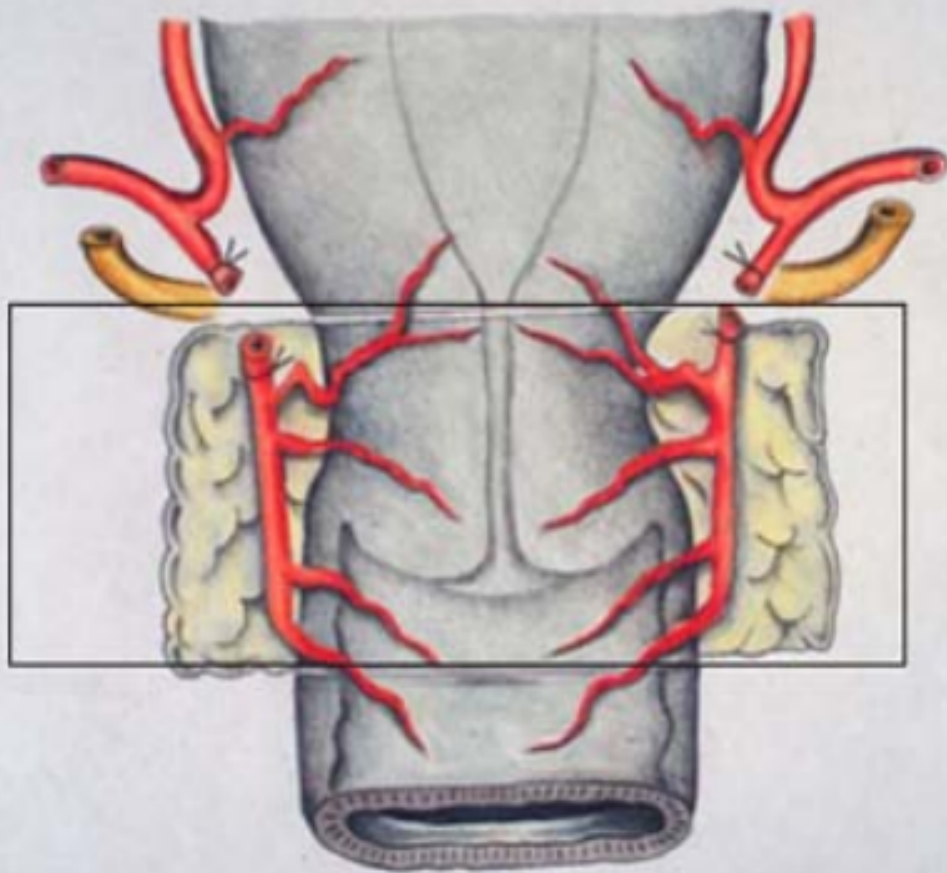
This operation is done both laparoscopically (where three or four small incisions are made in the tummy) and through the vagina. It involves removing the whole of the cervix and a small part of the vagina, the pelvic lymph nodes (lymph glands in this area) and the tissue around the cervix. The vaginal component of the operation is usually cumbersome especially in women who have never had a vaginal delivery, as the vaginal is usually very tight.

### Total laparoscopic radical trachelectomy (TLRT)

The entire operation is usually performed laparoscopically (key-hole) via 4 tiny cuts on your tummy. This allows removal of the cervix, surrounding tissue, top of the vagina and the lymph glands. The advantages of the key hole approach are: quicker recovery, less scarring, reduced pain, reduced amount of blood loss during surgery and quicker return to work. The keyhole approach also allows for better visualization of all the tissues to be removed because of increased magnification of the tissues on a high definition camera system.

All of the above methods of radical trachelectomy are done while you are asleep under a general anaesthetic.

uterus



vagina

# Common Questions

## WHAT IS THE AIM OF TREATMENT?

The aim of radical trachelectomy is to ensure complete removal of the cancer and to be sure that only normal tissue remains.

However, the operation may be converted to a radical hysterectomy or abandoned in favour of chemotherapy/radiotherapy if during the operation we suspect that the cancer has spread.

During the operation a sample of the lymph nodes and the cervix may be examined to detect whether the cancer has spread. If cancer cells are found, the operation may be converted to a radical hysterectomy or abandoned.

All the tissue and lymph nodes removed during the operation are examined in the laboratory in the two to three weeks following surgery. After the operation, your hospital doctor will discuss with you these results to decide if you need either further surgery to remove the womb or radiotherapy treatment to destroy the remaining cancer cells.

## WHO IS SUITABLE FOR RADICAL TRACHELECTOMY?

Not everyone will be suitable for this operation. A careful assessment will be carried out, as the cancer must be diagnosed at an early stage where it is confined to the cervix. The type of radical trachelectomy you are offered will usually depend on the experience of your surgeon on one or more of the above operative procedures.

Please note we are unable to guarantee that your fertility will be preserved after this operation. If you do get pregnant after the operation, there is also a possibility of miscarriage.

Usually during the operation, your surgeon will insert a large permanent suture (stitch) around the opening of the uterus, strong enough to reduce the risk of a miscarriage.

## WHAT HAPPENS BEFORE YOUR OPERATION?

MRI scan (special scan to locate the position and the size of the cancer as well as exclude the possibility of cancer spread).

Review of all of your results, including the scans, findings of your examinations and any biopsies (tissue samples) taken either at Nottingham University Hospital, or at the hospital that referred you to us.



## ARE THERE ANY RISKS ASSOCIATED WITH RADICAL TRACHELECTOMY?

As with any operation, there are risks.

Infections (usually minor wound or urine infection), bladder complications, including difficulty emptying the bladder, injury to the ureter, injury to the bowels, injury to nerves, deep vein thrombosis (DVT), pulmonary embolism, lymphoedema (swelling of the legs), haemorrhage (internal bleeding), which may require a second operation to control the bleeding, haematoma (bruising under the skin). Needing to convert the operation to a laparotomy, which is an 'open' operation where a larger cut is made across the lower abdomen (tummy).

Please note that after a radical trachelectomy, the bladder and bowels may take a few days to start working properly again.

In rare cases, a hole may develop in the bladder or ureter, which may result in urine leaking into the vagina. The hole may close on its own without surgery, but if it does not, a second operation may be needed to repair it.

We take many steps to keep the risks to a minimum. For example:

- We give you antibiotics to prevent infection and the procedure is carried out in sterile conditions
- We ask you to wear special support stockings and to take medication to thin the blood, as this helps to prevent the formation of blood clots
- Your anaesthetist will see you before the operation to check that you are fit for the anaesthetic.

## ARE THERE ANY LONG-TERM SIDE EFFECTS ASSOCIATED WITH THIS OPERATION?

You may develop lymphoedema (swelling of the legs). This can vary in severity and is permanent, but can be managed. You may also experience numbness on the anterior aspect of your thighs. This is because the nerves that supply this part of your body can be damaged during removal of the lymph glands. This may eventually get better or could persist for several weeks or even months. It should however not disturb your mobility and you will eventually get used to it.

If you become pregnant, you will need to be referred as soon as possible to a hospital with obstetric and neonatal facilities. The obstetrician will then contact the consultant who carried out your radical trachelectomy operation for details of your medical history and of the special care you will need for the safe delivery of your baby.

When you are about 38 weeks pregnant, you will need to have an elective (planned) caesarean section to deliver your baby safely. This is because it will not be safe for you to have a vaginal birth, as you will no longer have a cervix. Also, delivering your baby vaginally may disturb the stitch at the base of your uterus (inserted during your trachelectomy to help prevent miscarriage).

## **ARE THERE ANY ALTERNATIVES TO THIS OPERATION?**

Radical hysterectomy is the standard procedure for cervical cancer but involves removal of the uterus (womb). Chemotherapy/radiotherapy is offered for larger tumours (cancers) and where there is evidence that lymph nodes are strongly suspected of or known to contain cancerous cells.

## **WILL I LOSE MY OVARIES?**

With radical trachelectomy, the aim of the treatment is to preserve fertility and so the ovaries are not removed

## **WILL I HAVE A SCAR?**

Yes, although it will fade as time passes.

## **EMOTIONS**

If you have recently been diagnosed with cancer, it is normal to experience a wide range of emotions. It may be a frightening and unsettling time.

You may find it helpful to talk about your feelings and concerns with someone who specialises in dealing with this condition, such as the gynaecological cancer specialist nurse, who will also be your key worker. She is able to offer increased levels of support, advice and guidance about your illness and if you wish can put you in touch with the Macmillan counselor or support agencies. Some useful contact numbers are also listed in the back of this booklet.

It can also be a worrying time for your partner. He or she may like to be involved in discussions about the operation and how it is likely to affect you both.

If you do not have a partner at the moment, you may have concerns either now or in the future about starting a relationship after having had a radical trachelectomy.

Please do not hesitate to contact the gynaecological cancer specialist nurse if you have any queries or concerns about your diagnosis, the surgery, or to discuss the support you may need. She can also discuss with you either before or after the operation intimate issues or concerns about your sexuality, change in body image or your sexual relationship

# Preparing

## WHAT HAPPENS BEFORE MY OPERATION AND IS THERE ANYTHING I CAN DO?

Make sure all your questions have been answered to your satisfaction and that you fully understand what is going to happen to you. You are more than welcome to visit the ward during visiting times and meet the staff before you are admitted to hospital. Just ask the gynaecological cancer specialist nurse (also called key-worker) or one of the clinic nurses to arrange this for you.

An enhanced recovery program (ERP) has been established at Nottingham University Hospitals for patients undergoing surgery. It aims to reduce complications and the length of your hospital stay. An important part of this program of care is your understanding of how you, and possibly your family and friends, can play an active part in your recovery.

An appointment at the pre-admission assessment clinic will be arranged with you a week or two before your operation date. The pre-admission assessment appointment is an opportunity to ensure that you are medically fit for the operation. This will involve taking a full medical history and ordering any tests that you may require to prepare you for your operation, such as a blood test, chest x-ray or ECG (recording of your heart).

If you take blood-thinning medication (such as warfarin or aspirin) and/or you are allergic to any medications, please tell your doctor or specialist nurse when they discuss the date for surgery with you.

It is important that you are as fit as possible. If you smoke try to give up as soon as possible as smokers are much more likely to develop chest infections after surgery. Stopping smoking will reduce the risk of chest infections, as smoking makes your lungs sensitive to the anaesthetic.

Many women suffer from constipation after surgery. We advise that you buy docusate from your local pharmacy. Docusate is a laxative, which takes 1-2 days to achieve effect. Take one capsule (100mg) three times a day. This keeps the bowel motion soft, so that there should be less need to strain to open your bowels in the post-operative recovery period. You should start to take this, 3 days before your operation and afterwards until normal bowel function returns.

Prior to surgery you may be given an enema or suppository (medicine which is given via the rectum). This will empty the lower bowels, which makes the operation easier.

You should also eat a balanced diet and if you feel well enough, take some gentle exercise before the operation, as this will also help you to recover quickly afterwards.

Before you come into hospital for your operation, try to organise things ready for when you come home. If you have a freezer, stock it with easy-to-prepare food. Arrange for relatives and friends to do your heavy work (such as housework, changing your bed sheets, vacuuming, gardening and shopping).

You may wish to discuss this further with the gynaecological cancer specialist nurse/keyworker if this is a problem. A social services assessment may be suggested if you feel you need further support at home to recover from the operation.

## CONSENT

You will be asked for your consent before your treatment begins. Your doctor and/or gynaecological cancer nurse specialist/key-worker will carefully explain the procedure involved. Details will vary according to each individual case. No medical treatment can be given without your written consent.

If you do not understand what you have been told, let the staff know straight away, so they can explain again. You may also find it useful to write a list of questions before your appointment and to have a relative or friend with you to help you remember the discussion when the treatment is explained.

All clinical communications copied to your GP may also be sent to you at your request. Please discuss this with your gynaecological nurse specialist/key-worker.

# Operation Day

## WHAT HAPPENS ON THE DAY OF THE OPERATION?

On the day of your admission, please bring all the medication that you take regularly. You will be admitted to hospital either the day before or on the day of your surgery. We will ask you not to eat or drink anything for at least six hours before your operation is scheduled to take place. This will be discussed further at the pre-admission assessment clinic.

We will give you special stockings to wear and start you on heparin injections to prevent blood clots (DVT) from forming in your legs following surgery. Your hospital doctor will discuss this with you.

The physiotherapists will also show you some useful exercises to do after surgery.

You will be asked to have a shower or bath and put on a theatre gown. All make-up, nail varnish, jewellery (except wedding rings, which can be taped into place), body piercings, wigs, contact lenses and dentures must be removed. One of the nurses will then come and take you to the operating theatre.

## WHAT HAPPENS AFTER THE OPERATION?

You will wake up in the recovery room before you are taken back to the ward.

You may feel light-headed or sleepy after the operation. This is due to the anaesthetic and may continue until the next morning. You will have a drip attached to your arm to provide you with fluids. This is to prevent dehydration until you are able to drink. It is important that you start to drink and eat after your operation soon as it is recommended by your doctor. You will be encouraged to walk to the ward dining room for all meals. There is no restriction on the type of food you can have. You will also have protein or milk drinks every day until you are ready to go home to help you recover and your wound heal better.

After the operation, the bladder may take some time to begin working properly. A urethral catheter (tube) will be inside your bladder to drain urine away through your urethra (passage through which you normally pass urine) and to allow the bladder to recover. The catheter will be removed after about 5 days. You do not have to stay on admission. In fact, you may be discharged home within 48-72 hours of your operation. The catheter can be attached to a leg back so that you are able to move around freely. You will have to come back to the ward to have it removed.



Following removal, you will require bladder scans on the same day to make sure that your bladder is emptying urine completely. There is a bladder protocol on the ward for the nursing staff to follow and you will be well advised of all steps.

You may have some vaginal bleeding or a bloodstained discharge but this does not usually last more than a few days.

You may also have wind and have trouble opening your bowels for the first few days after the operation. This is temporary and we can give you laxatives if you need them. The gas that is used to distend your tummy during the keyhole operation may also make you feel bloated as well as cause pain in your shoulders. Again, this is temporary and will eventually get better over a few days.

You may have a sore throat for two to three days after having a general anaesthetic. This sometimes happens because the anaesthetist has to pass a tube down your windpipe to give you the anaesthetic gases that keep you asleep during the operation.

We will encourage you to do gentle leg and breathing exercises to help with circulation and prevent chest infections. The physiotherapist will help and advise you with this. You will also be encouraged to get out of bed and start moving around as soon as possible, as this will help with your recovery.

# After care

## PAIN

Please tell us if you are in pain or feel sick. There are several ways to help you control your pain and the anaesthetist will discuss these with you. You may have a device, which you use to control pain yourself. This is known as a PCA (patient-controlled analgesia) pump and you will be shown how to use it. Immediately after your operation, the surgeon will usually instill some local anaesthetic injection into your wounds to lessen your immediate post-operative pain. We also have tablets/injections that we can give you as and when required, so that you remain comfortable and pain free.

## WHEN CAN I GO HOME?

You will be in hospital for about 2-3 days. You will be supplied with anti-clotting injections to take home. You will be shown how to inject yourself before you leave. Please discuss this with the nurse.

Please arrange for someone to collect you by car or accompany you home in a taxi, as you will not be able to drive yourself or travel on public transport.

If you have been prescribed medication during your stay in hospital, we will give you a supply of this to take home with you.

## **IS THERE ANYTHING I NEED TO WATCH OUT FOR AT HOME?**

Please contact your GP or key worker, or go to your nearest accident & emergency (A&E) department if you have:

- Excessive redness or discharge around your wound site
- High temperature or fever (38°C or above)
- Heavy vaginal bleeding
- Offensive smelling discharge from your vagina
- Pain or swelling in your calves or in the veins in your leg
- Difficulty in breathing
- Difficulty in passing urine

The above list is by no means exhaustive. If you are worried about anything, you should either go to your surgery, contact your key worker or the gynaecology ward.

## **WHAT HAPPENS WHEN I LEAVE THE HOSPITAL?**

It is normal to feel tired when you go home, and you may find that you need extra sleep and rest during the day. Your body will tell you what you can and cannot manage. However, your energy levels and what you feel able to do will increase with time.

Avoid heavy or strenuous housework for the first few weeks or until you have had your check-up in the outpatient clinic.

You should also avoid aerobic exercise, jogging and swimming until advised otherwise by your doctor, but continue with gentle activities and exercise, such as walking.

Try to eat a balanced diet and rest as much as possible, accepting all help that is offered to you. Continue with gentle activities, such as making drinks, light dusting and washing up, gradually increasing your level of activity. Gentle exercise such as walking is an important part of your recovery after surgery. Avoid lifting anything heavy for four to six weeks after your operation.

## **WHEN CAN I START DRIVING AGAIN?**

You are advised not to drive for about four weeks after your operation. However, this period may be longer if your operation is converted to 'open'. Moreover, recovery after an operation is individual as some patients will recover more quickly than others. This is why it is important to optimize your health before your operation, as this tends to help recovery. It is important to inform your insurance company that you have had an operation to ensure that you are covered in the event of an accident. You should also make sure that you are not drowsy from any painkillers and that your concentration is good.

## **WHEN CAN I RETURN TO WORK?**

You may return to work four to six weeks after surgery, but this will depend on the type of work you do and again your individual recovery. We can provide medical certificates for your hospital stay, but you will need to see your GP for further certificates.

## WHEN CAN I HAVE SEX?

We advise you not to have sex for at least six weeks after surgery.

After a radical trachelectomy for cervical cancer, you may not feel physically or emotionally ready to start having sex again for a while.

It can take at least six weeks for the top of the vagina to heal and even longer for energy levels and sexual desire to get back to normal.

You may experience a small amount of discharge (brown or blood-stained) from the stitches in the vagina. Please do not attempt to have sex until this stops, due to risk of infection. If this discharge becomes smelly, please contact your GP for advice.

During your recovery, it may feel important for you and your partner to maintain intimacy (such as kissing, stroking etc.), despite not having sexual intercourse. Some couples are both physically and emotionally ready to resume having sex much sooner and this can feel like a positive step.

If you or your partner have any queries or concerns about this, please do discuss them with the gynaecological cancer specialist nurse/key worker. She can answer your questions and provide reassurance about sexual function either before or at any time after surgery.

We will advise you to use contraception for at least six months after surgery. Your body will need this time to recover from the operation before it can carry a baby. Please discuss this further with your doctor if you wish.

Once you have fully recovered from your operation and there are no signs of further cancer, we will advise you when it would be safe to try and get pregnant.

## WILL I NEED TO VISIT THE HOSPITAL AGAIN?

Yes, for a check-up in the outpatient clinic about two weeks after your operation.

You will receive an appointment to attend the gynaecological outpatient department to check your wound is healing well, give you your final results and discuss whether further treatment is recommended.

We will also give you a vaginal examination to check that it is healing and may take a smear from the top of your vagina once it has fully healed.

You will need to return to clinic regularly over the next five years (every three months to start with) to check that there are no signs of the cancer returning.

It may also help to bring someone with you when you attend your outpatient follow-up appointments.

#### Other sources of information:

Macmillan Cancer Information

Maggie's Cancer Caring Centre

Macmillan Cancer Support Helpline

Jo's Cervical Cancer Trust

[www.jostrust.org.uk/](http://www.jostrust.org.uk/)

Telephone: 0808 802 8000

Gynae Solution

Gynae Solution aims to support women with any form of gynaecological cancer, their partner, family and friends.

This charity offers confidential, emotional support via a telephone helpline, email, letters and website

[www.gynaesolution.com](http://www.gynaesolution.com)

Telephone: 01793 491116

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