Having an open retroperitoneal lymph node dissection (RPLND)

This leaflet explains more about having an RPLND, including the benefits, risks, any alternatives, and what you can expect when you come to hospital. If you have any questions, please speak to a doctor or nurse caring for you.

What is a RPLND?
A lymph node dissection is an operation to remove enlarged lymph nodes. The lymph nodes are small bean-shaped structures that filter, or trap, any cancer cells (or other foreign particles) in the lymphatic fluid. ‘Retroperitoneal’ refers to the location of these nodes. They are in the retroperitoneum, an area behind the bowel at the back of the abdomen where the main blood vessels, the aorta and vena cava, run. An RPLND is an operation to remove these enlarged lymph nodes.

Why should you have an RPLND?
An RPLND has been recommended as part of your treatment for testicular cancer. The specialist multidisciplinary team looking after men with testicular cancer has recommended this course of action after reviewing your scans and other results.

An RPLND is usually performed after you have completed chemotherapy treatment for testicular cancer that has spread to the retroperitoneal lymph nodes. Quite often the chemotherapy kills the active cancer cells, but the lymph nodes may not shrink to a normal size. There might be some cells remaining, called teratoma, which are not very aggressive, but which could become cancerous again in the future. An RPLND aims to try to stop this from happening.

In other cases, there are a few aggressive cancer cells in the lymph nodes, so removing the nodes may cure the cancer. The only way to know for sure is to remove those lymph nodes and send them to the laboratory for analysis.

Occasionally an RPLND is done after you have had your testicle removed (orchidectomy) and before any chemotherapy treatment is given. In this situation, an RPLND is done to remove the lymph nodes where the disease is likely to spread to next. In this case, it should be thought of as a 'staging' procedure. If the lymph nodes removed contain no cancer when they are examined, it is very unlikely that the cancer will come back in the future. If there are some cancer cells present, the specialists will advise if you need chemotherapy.
**What are the risks?**
Your urology team will discuss all risks and complications with you when you come to the urology clinic.

- **Bleeding after surgery.** This is the main risk of the operation. This is because the lymph nodes are sometimes stuck to blood vessels which can then be difficult to separate. About 1 in 100 patients will develop internal bleeding after an RPLND. If this happens, you may need a blood transfusion and have another operation.

- **Vascular graft.** Occasionally, blood vessels have to be removed and replaced with a graft. This happens in about 2 in 100 patients having this surgery.

- **Damage to ureter.** If the mass of lymph nodes is stuck to the ureter, it could be damaged. The surgeon may place a stent in the ureter to minimise this risk.

- **Problems relating to the anaesthetic.** Although rare, it is possible to have complications as a result of having a general anaesthetic (being put to sleep so you feel no pain during the operation). The anaesthetist will discuss this with you. For more information, please ask for a copy of the leaflet *Having an anaesthetic.*

- **Problems relating to surgery.** These are rare, but include deep vein thrombosis (DVT, a blood clot in the leg) or pulmonary embolism (a blood clot in the lung).

- **Infection or hernia.** As with all procedures, there is a small risk of developing an infection, or a hernia, at the wound site. A hernia is where an internal part of the body, such as an organ, pushes through a weakness in the muscle or surrounding tissue wall.

- **Collection of fluid.** One possible complication of this surgery is that lymphatic fluid can collect in the area where the lymph nodes were removed. Usually this heals on its own, but may occasionally need to be drained, or very occasionally you may need another operation to drain this.

- **Delay in leaving the hospital.** This is most commonly due to chest infection.

- **Death.** As with all operations, there is a very low risk of death.

- **Infertility.** Although you will have discussed issues of fertility with your surgeon or cancer specialist already, it is important that you are aware this operation can cause temporary or permanent infertility.

Occasionally, the operation can cause your semen to be directed back into your bladder (retrograde ejaculation) instead of coming out through your penis. This is called a ‘dry orgasm’ or ‘retrograde ejaculation’. However, the sensation of climax remains the same. The semen is passed into your bladder which causes no harm. It is flushed away with your urine.

If this does happen, it is very likely that you will be sterile (infertile). It is possible the retrograde ejaculation will recover over several years but this is not certain and it is not correctable. Your surgeon will tell you if it is likely to happen in your case. A referral for sperm storage and freezing can be made before surgery if you wish to store your sperm for future attempts at pregnancy providing you have not just had chemotherapy. Please ask the surgeon or one of the nurse specialists about this before your operation.

**Are there any alternatives?**
Before the operation, your surgeon and cancer specialist will discuss this with you. Sometimes an RPLND can be done using keyhole surgery under robotic control. This decision is something that will be discussed with your surgeon.
How can you prepare for your procedure?
You will come to a pre-assessment clinic before your surgery. It is very important that you come to this appointment, as we will assess your suitability and fitness for surgery and anaesthetic. We will carry out a number of tests to make sure that your heart, lungs and kidneys are working properly. You may have a chest X-ray, ECG (electrocardiogram which records the electrical activity of your heart) and blood tests. Your doctor will explain any other tests you may need.

If you do not attend this appointment, we may have to cancel your surgery.

Smoking
If you smoke, you may be asked to stop smoking, as this increases the risk of developing a chest infection or deep vein thrombosis or DVT (blood clot in a deep vein). Smoking can also delay wound healing because it reduces the amount of oxygen that reaches the tissues in your body. If you would like to give up smoking, please speak to your nurse or call the Trust stop smoking service, t: 020 7188 0995, or call the NHS Smoking Helpline, t: 0300 123 1044.

Medicines
If you are taking any medication, these may need to be temporarily stopped or adjusted around the time of your surgery or treatment. You will be given information on how to do this at your pre-assessment appointment. Do not make any changes to your usual medicines, and continue to take them unless you have been advised to do so. Please remember to bring them into hospital with you.

If you are taking any medicines that thin your blood, such as antiplatelet medicines (for example, aspirin or clopidogrel) or anticoagulant medicines (for example, warfarin or rivaroxaban), please tell your doctor or nurse as you may need to stop them temporarily before your surgery. Also tell your doctor or nurse if you have diabetes as you may need to alter the dose of your diabetes medicines, as you will need to fast before the procedure. More information on stopping any medicines will be given to you when you come for pre-assessment.

Please ask us if you have any questions.

Please let us know if you are taking any regular medicines (including anything you buy over the counter, any herbal or homeopathic medicines) and if you have any allergies to any medicines.

Fasting instructions
As you are having a general anaesthetic, you will need to fast (not eat and drink) before surgery. Please do not eat or drink anything (except non-fizzy water) for six hours before your appointment. This means that you cannot suck on sweets or chew gum. You are allowed to drink water up to two hours before your appointment. If you continue to eat or drink after this, your surgery will be cancelled.

Giving your consent (permission)
We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves.

If you would like more information about our consent process, please speak to a member of staff caring for you.
What happens during an RPLND?
The operation is carried out under general anaesthetic. A long incision (cut) is made into your abdomen (tummy) to give the surgeon access to remove the necessary lymph nodes. This incision starts just under your breastbone and goes down below your umbilicus (tummy button). In some cases keyhole surgery may be performed (laparoscopic RPLND). This is not usually possible after you have had chemotherapy. The operation usually takes 2-4 hours.

What happens after an RPLND? Will you feel any pain?
You will be taken from theatre to the recovery room, or to Guy’s Critical Care Unit, where you will be closely monitored until you are awake enough to return to the ward. When you wake up from your operation you may have one or all of the following:

- **A drip into the arm or neck.** Fluids are given intravenously (into the vein) via a drip into the arm or neck to keep you hydrated. This is necessary as you will be unable to eat or drink straight after your operation. Medication can also be given through the drip.
- **Patient controlled analgesia (PCA).** The painkillers will be administered through your cannula, using a patient controlled analgesia (PCA) system. You are given a handheld control with a button to press when you are experiencing pain. This will give you a dose of the painkiller. The amount given will be set by the anaesthetist or the pain team. It is set so that you cannot be given more than the amount prescribed.
- **Epidural.** An epidural is an injection of local anaesthetic into the space around your spinal cord providing direct pain relief. You will be given a separate leaflet with more information about this.
- **Oxygen.** While you are receiving these strong painkillers you will need to have oxygen to help with your breathing. You can be given oxygen through an oxygen mask or through nasal specs (small prongs that sit just inside your nose).
- **Catheter.** A tube that is inserted into your urethra to the bladder, allowing drainage of your urine. This is to keep the bladder empty of urine until you are more mobile. This is inserted after your anaesthetic.
- **Wound dressing.** This is to cover your wound while it heals. The dressing will be redressed after 24-48 hours by a nurse. The staples will be removed by your district/practice nurse 14 days after your surgery.
- **Physiotherapy.** The day after the operation the physiotherapist will help you get out of bed into a chair. They will also teach you deep breathing and leg exercises. These are very important to help you recover from the operation. After the first day, your tubes will gradually be removed and you will become more mobile. You will probably stay in hospital for about 4-6 days after your operation.

You will be asked to wear anti-thrombosis stockings. This reduces the risk of you developing a blood clot in the leg or lung.

What do you need to do after you go home?
You have had a major operation and will feel quite tired when you go home. It is important to rest and at first you may feel like having a sleep during the day. It is also important to take exercise regularly. This should be very gentle at first, but gradually built up as you start to have more energy. You may not feel fully recovered for about 6-12 weeks after the operation.
What about lifting?
You should try to take things easy for the first 10 days after leaving hospital, keeping all physical activity to a minimum. You should avoid any activities that involve heavy lifting for about six weeks after leaving hospital.

When can you drive?
You must feel comfortable to do an emergency stop before you start to drive again. This is normally about six weeks after the operation. You should check for any restrictions with your insurance provider.

When can you resume your sex life?
You should not have sexual intercourse for two weeks after your operation.

When can you return to work?
You may be able to go back to work about six weeks after the operation, but if you have a manual job that involves heavy lifting or physical work, you should not return for at least eight weeks. If you need a fit note, you can collect one from the ward to cover the time you spent in hospital. If you need one when you return home, you will be able to collect one from your GP.

When can you fly?
You should not fly until after you have seen the surgeon in the outpatients department about three weeks after your operation. This is because there is an increased risk of having a blood clot in your leg.

Will you have a follow-up appointment?
The oncologist will see you about three weeks after your operation, in the outpatients department to discuss the histology results and future management of your cancer. The surgeon will see you six weeks after your operation to see how well you are recovering and to check when you will be fit to go back to work.

Useful sources of information
This leaflet is intended as a guide, but we understand that you will probably have more questions. If you have concerns, your doctor or nurse will be happy to discuss these with you.

Macmillan Cancer Support
They produce a free, booklet called “Understanding Testicular Cancer”. You can order a booklet at w: www.macmillan.org.uk or calling their freephone number 0808 808 00 00.

Orchid Cancer Appeal
Aims to increase public awareness and improve the treatment of men’s cancers, particularly testicular and prostate cancers, t: 0808 802 0010, w: www.orchid-cancer.org.uk e: helpline@orchid-cancer.org.uk
Contact us
If you have any questions or concerns about your surgery, please contact the CNS team, t: 020 7188 7823, Monday to Friday, 9am-5pm. Out of hours, please contact Aston Key Ward, t: 020 7188 or Florence Ward, t: 020 7188.

Call the hospital switchboard, t: 020 7188 7188 and ask for the bleep desk. Ask for bleep 1133 and wait for a response. This will connect you to the CNS team directly.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit, w: www.guysandstthomas.nhs.uk/leaflets.

Guy’s and St Thomas’ hospitals offer a range of cancer-related information leaflets for patients and carers, available at, w: www.guysandstthomas.nhs.uk/cancer-leaflets. For information leaflets on other conditions, procedures, treatments and services offered at our hospitals, please visit, w: www.guysandstthomas.nhs.uk/leaflets

Dimbleby Cancer Care provides cancer support services for Guy’s and St Thomas’. We have a drop-in information area staffed by specialist nurses and offer complementary therapies, psychological support and benefits advice for patients and carers.

Dimbleby Cancer Care is located in the Welcome Village of the Cancer Centre at Guy’s, t: 020 7188 5918 e: DimblebyCancerCare@gstt.nhs.uk

Pharmacy Medicines Helpline
If you have any questions or concerns about your medicines, please speak to the clinical nurse specialist or other member of staff caring for you or call our helpline.
t: 020 7188 8748 9am to 5pm, Monday to Friday

Your comments and concerns
For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.
t: 020 7188 8801 (PALS) e: pals@gstt.nhs.uk
t: 020 7188 3514 (complaints) e: complaints2@gstt.nhs.uk

Language and accessible support services
If you need an interpreter or information about your care in a different language or format, please get in touch, t: 020 7188 8815 e: languagesupport@gstt.nhs.uk

NHS 111
Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day, t: 111

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Our values: Put patients first | Take pride in what we do | Respect others | Strive to be the best | Act with integrity