Urology Department

Retroperitoneal excision of abdominal lymph nodes (RPLND)

What is the evidence base for this information?

This leaflet includes advice from consensus panels, the British Association of Urological Surgeons, the Department of Health and evidence based sources; it is, therefore, a reflection of best practice in the UK. It is intended to supplement any advice you may already have been given by your urologist or nurse specialist as well as the surgical team at Addenbrookes. Alternative treatments are outlined below and can be discussed in more detail with your urologist or specialist nurse.

What does the procedure involve?

This involves removal of the lymph nodes alongside the main blood vessels in the abdomen and usually follows chemotherapy or radiotherapy treatment for testicular cancer.

What are the alternatives to this procedure?

Observation (not recommended).

The retroperitoneum is the space behind the gut where the main blood vessels (the aorta and vena cava) run. Lymph nodes are usually small (French beansized) structures which trap cancer cells and may become enlarged.

The operation is designed to remove these nodes and is carried out as part of your treatment for testicular cancer. It is normally performed after you have completed chemotherapy; if this does not cause the lymph nodes to shrink to a normal size, there is a possibility that there may be some cells in them which could become cancerous in the future. The only way to know this for sure is to remove these lymph glands and to send them to the laboratory for microscopic examination (histology).

What should I expect before the procedure?

Although you will have discussed issues of sterility with your urologist or oncologist, it is important to be aware that the nerves which control ejaculation run through the middle of the surgical area. We try to preserve these nerves but there is always a risk of damage because there may be a lot of scar tissue around the nerves after the chemotherapy treatment. This can result in weak or absent ejaculation after the operation and the semen may even be directed back into your bladder instead of coming out through your penis (a "dry" orgasm).

This is not, of course, harmful; the semen is flushed away with your urine but, if this does occur, it is very likely that you will be sterile. This does not, however, always happen and you urologist may be able to tell you if it is likely in your case.

If you have not already done so, it may be possible for you to store semen as a precaution and you should discuss this with your urologist before the procedure.
You will see the urology team in the uro-oncology clinic to discuss the operation in detail and you will usually be admitted on the day before your surgery. You will normally undergo pre-assessment on the day of your clinic or an appointment for pre-assessment will be made from clinic, to assess your general fitness, to screen for the carriage of MRSA and to perform some baseline investigations.

After admission, you will be seen by members of the medical team which may include the consultant, junior urology doctors and your named nurse.

On the day before your operation, you will only be allowed to drink clear fluids such as water, squash, black tea or coffee. You may also be given a laxative to clear your bowel. Immediately before the operation, you may be given a premedication by the anaesthetist which will make you dry-mouthed and pleasantly sleepy.

You will be given an injection under the skin of a drug (Dalteparin), which, along with the help of elasticated stockings provided by the ward, will help prevent thrombosis (clots) in the veins.

Please be sure to inform your urologist in advance of your surgery if you have any of the following:

- an artificial heart valve
- a coronary artery stent
- a heart pacemaker or defibrillator
- an artificial joint
- an artificial blood vessel graft
- a neurosurgical shunt
- any other implanted foreign body
- a prescription for Warfarin, Aspirin, Rivaroxaban, Dabigatran, Apixaban, Edoxaban or Clopidogrel, Ticagrelor or blood thinning medication
- a previous or current MRSA infection
- high risk of variant CJD (if you have received a corneal transplant, a neurosurgical dural transplant or previous injections of human derived growth hormone)

**What happens during the procedure?**

Normally, a full general anaesthetic will be used and you will be asleep throughout the procedure. In some patients, the anaesthetist may also use an epidural anaesthetic which improves or minimises pain post-operatively.

A long incision is made in your abdomen to enable the surgeon to access and remove the necessary lymph nodes. The operation normally takes three to six hours to perform.
What happens immediately after the procedure?
You will be taken from the operating theatre to a fast track recovery area where your condition will be closely monitored until you are awake enough to return to the ward. Some men require observation in the intensive therapy unit (ITU) to allow closer monitoring; visiting times in these areas are flexible and will depend on when you return from the operating theatre.

You will have a drip to keep you hydrated, through which you can also be given medication. You will be given separate information about patient controlled analgesia (PCA) or an epidural anaesthetic which are designed to minimise postoperative pain. You will be given oxygen via a mask or nasal spectacles.

A catheter is usually inserted into the bladder and a dressing will cover your wound; the wound itself is usually closed with staples which are removed after seven to 10 days.

You will receive physiotherapy, starting on the day after the operation, to encourage mobility, deep breathing and leg movements. You can usually start drinking water two to three days after the procedure and, once bowel activity has returned, you will be able to drink and eat freely.

The average hospital stay is nine days.

Are there any side effects?
Most procedures have a potential for side effects. You should be reassured that, although all these complications are well recognised, the majority of patients do not suffer any problems after a urological procedure.

Please use the check boxes to tick off individual items when you are happy that they have been discussed to your satisfaction:

**Common (greater than one in 10)**
- [ ] Temporary insertion of a bladder catheter and wound drain
- [ ] Problems with ejaculation failure after the surgery
- [ ] Accumulation of lymph fluid after the operation, requiring drainage
- [ ] Infection, pain or bulging of the incision site requiring further treatment
- [ ] The microscopic examination of the lymph nodes may subsequently show no sign of cancer in the lymph glands removed
Occasional (between one in 10 and one in 50)
- Bleeding requiring further surgery or transfusions
- It may not be possible to remove the nodes without removing the kidney on the affected side
- Need for further treatment of the cancer
- Involvement or injury to nearby local structures (blood vessels, spleen liver, lung, pancreas and bowel) requiring more extensive surgery

Rare (less than one in 50)
- Anaesthetic or cardiovascular problems possibly requiring intensive care admission (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, heart attack and death)
- Entry into the lung cavity requiring insertion of a temporary drainage tube
- A further operation for bowel obstruction caused by adhesions

What should I expect when I get home?
When you leave hospital, you will be given a discharge summary of your admission. This holds important information about your inpatient stay and your operation. If, in the first few weeks after your discharge, you need to call your GP for any reason or to attend another hospital, please take this summary with you to allow the doctors to see details of your treatment. This is particularly important if you need to consult another doctor within a few days of your discharge.

You will get home about seven to nine days after surgery and will require a minimum six week period of convalescence. After this you should be able to resume exercise gradually. The return to work will depend on the type of work you do. Very heavy manual labour might require up to three months further time off work. Light work would be possible normally after two months or so.

What else should I look out for?
You should watch out for signs of inflammation of the wound or swelling of the abdomen which might indicate fluid collection.

Are there any other important points?
You have had a large operation and will feel tired when you get 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 can be gradually built up as you start to have more energy. You may not feel fully recovered for six to 12 weeks.

The area around your incision will heal quickly but you may wish to cover it with a dressing to keep it clean and dry. You should keep physical activity to a minimum for the first 10 days after returning home. If you require a sick certificate, you can obtain this from the ward to cover the time you spent in hospital; thereafter, you will need to obtain a further certificate from your GP.

It will be at least 14 to 21 days before the pathology results on the tissue removed are available. It is normal practice for the results of all biopsies to be discussed in detail at a multi-disciplinary meeting before any further treatment decisions are made.
You and your GP will be informed of the results after this discussion. You will normally be reviewed in outpatients six weeks after your operation to monitor your progress. Your oncologist, however, will normally arrange to see you earlier than this (after two to three weeks) to discuss the pathology (biopsy) results.

If you have any concerns about this, please contact Jane Robson in the oncology centre on Tel 01223 216552.

**Driving after surgery**

It is your responsibility to ensure that you are fit to drive following your surgery.

You do not normally need to notify the DVLA unless you have a medical condition that will last for longer than three months after your surgery and may affect your ability to drive. You should, however, check with your insurance company before returning to driving. Your doctors will be happy to provide you with advice on request.

**Privacy & Dignity**

Same sex bays and bathrooms are offered in all wards except critical care and theatre recovery areas where the use of high tech equipment and/or specialist one to one care is required.

**Hair removal before an operation**

For most operations, you do not need to have the hair around the site of the operation removed. However, sometimes the healthcare team need to see or reach your skin and if this is necessary they will use an electric hair clipper with a single-use disposable head, on the day of the surgery. Please do not shave the hair yourself or use a razor to remove hair, as this can increase the risk of infection. Your healthcare team will be happy to discuss this with you.

**References**

NICE clinical guideline No 74: Surgical site infection (October 2008); Department of Health: High Impact Intervention No 4: Care bundle to preventing surgical site infection (August 2007)

**Is there any research being carried out in this field at Addenbrooke’s Hospital?**

Yes. As part of your operation, various specimens of tissue will be sent to the pathology department so that we can find out details of the disease and whether it has affected other areas. This information sheet has already described to you what tissue will be removed.

We would also like your agreement to carry out research on that tissue which will be left over when the pathologist has finished making a full diagnosis. Normally, this tissue is disposed of or simply stored. What we would like to do is to store samples of the tissue, both frozen and after it has been processed. Please note that we are not asking you to provide any tissue apart from that which would normally be removed during the operation.
We are carrying out a series of research projects which involve studying the genes and proteins produced by normal and diseased tissues. The reason for doing this is to try to discover differences between diseased and normal tissue to help develop new tests or treatments that might benefit future generations. This research is being carried out here in Cambridge but we sometimes work with other universities or with industry to move our research forwards more quickly than it would if we did everything here.

The consent form you will sign from the hospital allows you to indicate whether you are prepared to provide this tissue. If you would like any further information, please ask the ward to contact your consultant.

**Who can I contact for more help or information?**

**Oncology nurses**

Uro-oncology nurse specialist  
01223 586748

Bladder cancer nurse practitioner (haematuria, chemotherapy and BCG)  
01223 274608

Prostate cancer nurse practitioner  
01223 274608 or 216897 or bleep 154-548

Surgical care practitioner  
01223 348590 or 256157 or bleep 154-351

**Non-oncology nurses**

Urology nurse practitioner (incontinence, urodynamics, catheter patients)  
01223 274608 or 586748 or bleep 157-237

Urology nurse practitioner (stoma care)  
01223 349800

Urology nurse practitioner (stone disease)  
01223 349800 or bleep 152-879

**Patient Advice and Liaison Centre (PALS)**

Telephone:  
+44 (0)1223 216756 or 257257  
+44 (0)1223 274432 or 274431  
PatientLine: *801 (from patient bedside telephones only)

E mail: pals@addenbrookes.nhs.uk

Mail: PALS, Box No 53  
Addenbrooke’s Hospital  
Hills Road, Cambridge, CB2 2QQ
What should I do with this leaflet?
Thank you for taking the trouble to read this patient information leaflet. If you wish to sign it and retain a copy for your own records, please do so below.

If you would like a copy of this leaflet to be filed in your hospital records for future reference, please let your urologist or specialist nurse know. If you do, however, decide to proceed with the scheduled procedure, you will be asked to sign a separate consent form which will be filed in your hospital notes and you will, in addition, be provided with a copy of the form if you wish.

I have read this patient information leaflet and I accept the information it provides.

Signature.................................................Date.............................................
We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site.
For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats:
If you would like this information in another language, large print or audio, please ask the department where you are being treated, to contact the patient information team: patient.information@addenbrookes.nhs.uk.
Please note: We do not currently hold many leaflets in other languages; written translation requests are funded and agreed by the department who has authored the leaflet.

Document history
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