This leaflet contains evidence-based information about your proposed urological procedure. We have consulted specialist surgeons during its preparation, so that it represents best practice in UK urology. You should use it in addition to any advice already given to you.

To view the online version of this leaflet, type the text below into your web browser:
http://www.baus.org.uk/_userfiles/pages/files/Patients/Leaflets/Testicular biopsy.pdf

Key Points

- Testicular biopsy may be performed when a testicle has an abnormal appearance on ultrasound scan
- It previously used to establish a cause for male-factor infertility but it is now recommended that this is done at the time of surgical sperm retrieval
- Isolated testicular biopsies do not always accurately reflect any abnormality in the testis
- The biopsy may need to be ultrasound-guided to detect the specific area of abnormality to be sampled

What does this procedure involve?
Removal of a small piece of tissue for diagnostic purposes through an incision in your scrotum.

What are the alternatives?

- Observation – without any active treatment; this may include serial ultrasound scans and regular testicular self-examination

What happens on the day of the procedure?
Your urologist (or a member of their team) will briefly review your history and medications, and will discuss the surgery again with you to confirm your consent.
An anaesthetist will see you to discuss the options of a general anaesthetic or spinal anaesthetic. The anaesthetist will also discuss pain relief after the procedure with you.

We may provide you with a pair of TED stockings to wear, and we may give you a heparin injection to thin your blood. These help to prevent blood clots from developing and passing into your lungs. Your medical team will decide whether you need to continue these after you go home.

**Details of the procedure**

- we normally carry out the procedure under general anaesthetic
- you may have antibiotics given into a vein, after a careful check for allergies
- we make a small incision in your scrotum, over your testicles
- by making a tiny cut into the testicle, we can get a small amount of testicular tissue to bulge out
- we remove a small sample of this tissue for pathological analysis
- sometimes, we need an ultrasound machine to pinpoint exactly the abnormal area that needs to be biopsied
- we close the incision in your testicle and the scrotum with absorbable sutures which normally disappear within two to three weeks
- we put a dressing on the wound and supply you with a scrotal support

**Are there any after-effects?**

The possible after-effects and your risk of getting them are shown below. Some are self-limiting or reversible, but others are not. We have not listed very rare after-effects (occurring in less than 1 in 250 patients) individually. The impact of these after-effects can vary a lot from patient to patient; you should ask your surgeon’s advice about the risks and their impact on you as an individual:
What is my risk of a hospital-acquired infection?
Your risk of getting an infection in hospital is approximately 8 in 100 (8%); this includes getting MRSA or a Clostridium difficile bowel infection. This figure is higher if you are in a “high-risk” group of patients such as patients who have had:

- long-term drainage tubes (e.g. catheters);
- bladder removal;
- long hospital stays; or
- multiple hospital admissions.

<table>
<thead>
<tr>
<th>After-effect</th>
<th>Risk</th>
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<tr>
<td>Swelling and bruising of the scrotum which usually last a few days</td>
<td>Between 1 in 2 &amp; 1 in 10 patients</td>
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<tr>
<td>Infection in the surgical wound requiring antibiotics ± drainage</td>
<td>Between 1 in 10 &amp; 1 in 50 patients</td>
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<td>The pathology results from the biopsies may be inconclusive</td>
<td>Between 1 in 10 &amp; 1 in 50 patients</td>
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<tr>
<td>Inadvertent damage to the testicle, epididymis or vas deferens</td>
<td>Between 1 in 50 &amp; 1 in 250 patients</td>
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<tr>
<td>Atrophy (shrinkage) of the testicle</td>
<td>Between 1 in 50 &amp; 1 in 250 patients</td>
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<tr>
<td>Chronic pain in the testicle or scrotum</td>
<td>Between 1 in 50 &amp; 1 in 250 patients</td>
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<tr>
<td>Anaesthetic or cardiovascular problems possibly requiring intensive care (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, heart attack and death)</td>
<td>Between 1 in 50 &amp; 1 in 250 patients (your anaesthetist can estimate your individual risk)</td>
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</tbody>
</table>
What can I expect when I get home?

- you will get some swelling and bruising of the scrotum which may last several days
- simple painkillers such as paracetamol will help with any discomfort and a scrotal support may also help
- you will be given advice about your recovery at home
- you will be given a copy of your discharge summary and a copy will also be sent to your GP
- any antibiotics or other tablets you may need will be arranged & dispensed from the hospital pharmacy
- you should refrain from any heavy lifting or strenuous exercise for the first few weeks after the procedure
- a follow-up appointment will be made for you to discuss the results of the biopsy

General information about surgical procedures

Before your procedure
Please tell a member of the medical team if you have:

- an implanted foreign body (stent, joint replacement, pacemaker, heart valve, blood vessel graft);
- a regular prescription for a blood thinning agent (warfarin, aspirin, clopidogrel, rivaroxaban or dabigatran);
- a present or previous MRSA infection; or
- a high risk of variant-CJD (e.g. if you have had a corneal transplant, a neurosurgical dural transplant or human growth hormone treatment).

Questions you may wish to ask
If you wish to learn more about what will happen, you can find a list of suggested questions called “Having An Operation” on the website of the Royal College of Surgeons of England. You may also wish to ask your surgeon for his/her personal results and experience with this procedure.

Before you go home
We will tell you how the procedure went and you should:

- make sure you understand what has been done;
- ask the surgeon if everything went as planned;
- let the staff know if you have any discomfort;
- ask what you can (and cannot) do at home;
- make sure you know what happens next; and
- ask when you can return to normal activities.
We will give you advice about what to look out for when you get home. Your surgeon or nurse will also give you details of who to contact, and how to contact them, in the event of problems.

**Smoking and surgery**
Ideally, we would prefer you to stop smoking before any procedure. Smoking can worsen some urological conditions and makes complications more likely after surgery. For advice on stopping, you can:

- contact your GP;
- access your local NHS Smoking Help Online; or
- ring the free NHS Smoking Helpline on 0800 169 0 169.

**Driving after surgery**
It is your responsibility to make sure you are fit to drive after any surgical procedure. You only need to contact the DVLA if your ability to drive is likely to be affected for more than three months. If it is, you should check with your insurance company before driving again.

**What should I do with this information?**
Thank you for taking the trouble to read this information. Please let your urologist (or specialist nurse) know if you would like to have a copy for your own records. If you wish, the medical or nursing staff can also arrange to file a copy in your hospital notes.

**What sources have we used to prepare this leaflet?**
This leaflet uses information from consensus panels and other evidence-based sources including:

- the Department of Health (England);
- the Cochrane Collaboration; and
- the National Institute for Health and Care Excellence (NICE).

It also follows style guidelines from:

- the Royal National Institute for Blind People (RNIB);
- the Information Standard;
- the Patient Information Forum; and
- the Plain English Campaign.
Disclaimer
We have made every effort to give accurate information but there may still be errors or omissions in this leaflet. BAUS cannot accept responsibility for any loss from action taken (or not taken) as a result of this information.

PLEASE NOTE
The staff at BAUS are not medically trained, and are unable to answer questions about the information provided in this leaflet. If you do have any questions, you should contact your urologist, specialist nurse or GP.