REVERSAL OF VASECTOMY
INFORMATION FOR PATIENTS

What evidence is this information based on?
This booklet includes advice from consensus panels, the British Association of Urological Surgeons, the Department of Health and other sources. As such, it is a reflection of best urological practice in the UK. You should read this booklet with any advice your GP or other healthcare professional may already have given you. We have outlined alternative treatments below that you can discuss in more detail with your urologist or specialist nurse.

What does the procedure involve?
Rejoining of the previously separated tubes with microsurgical techniques and fine sutures.

What are the alternatives to this procedure?
Alternatives to this procedure include other forms of assisted conception and sperm aspiration.

If your vasectomy was performed 20 or more years ago, assisted conception with sperm aspiration may be a better option for you but this may involve your partner in some manipulation as well, to retrieve eggs. The complications of sperm aspiration include bleeding into the scrotum (less than 5%), infection (1%) and shrinkage of the testicle (less than 5%). There is a 5 to 30% risk of multiple pregnancies following assisted conception. Overall, the pregnancy rate is approximately 25 - 30% but this may require several cycles of treatment. Assisted conception is normally performed by your local Fertility Centre or Department of Reproductive Medicine.

What should I expect before the procedure?
Please note that it may be necessary to establish that your partner is ovulating before vasectomy reversal is undertaken.

You will usually be admitted to hospital on the same day as your surgery. You will normally receive an appointment for a “pre-assessment” to assess your general fitness, to screen you for MRSA and to do some baseline investigations. Once you have been admitted, you will be seen by members of the medical team which may include the consultant, specialist registrar, house officer and your named nurse.
You will be asked not to eat and drink for six hours before surgery. Immediately before the operation, the anaesthetist may give you a pre-medication which will make you dry-mouthed and pleasantly sleepy.

Please tell your surgeon (before 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 regular prescription for warfarin, aspirin or clopidogrel (Plavix®)
- A previous or current MRSA infection
- A high risk of variant-CJD (if you have had a corneal transplant, a neurosurgical dural transplant or injections of human-derived growth hormone).

When you are admitted to hospital, you will be asked to sign the second part of your operation consent form giving permission for your operation to take place, showing you understand what is to be done and confirming that you want to go ahead. Make sure that you are given the opportunity to discuss any concerns and to ask any questions you may still have before signing the form.

**What happens during the procedure?**

Either a full general anaesthetic (where you will be asleep) or a spinal anaesthetic (where you are unable to feel anything from the waist down) will be used. All methods reduce the level of pain afterwards. Your anaesthetist will explain the pros and cons of each type of anaesthetic to you.

The surgeon usually makes a small incision in the front of the scrotum. The ends of the tubes are found and re-joined with fine stitches using microsurgical techniques (pictured).

If the surgeon is not able to do this, it may be possible to join the upper ends to the sperm-carrying mechanism (epididymis). Unfortunately, the results of this are not as good as those from re-joining the vasa.

**What happens immediately after the procedure?**

You should be told how the procedure went and you should:

- ask the surgeon if it went as planned;
- let the medical staff know if you are in any discomfort;
• ask what you can and cannot do;
• feel free to ask any questions or discuss any concerns with the ward staff and members of the surgical team; and
• make sure that you are clear about what has been done and what happens next.

You may experience discomfort for a few days after the procedure but we will give you painkillers to take home. Absorbable stitches are normally used and do not require removal.

The average hospital stay is less than one day.

**Are there any side-effects?**
Most procedures have possible side-effects. But, although the complications listed below are well-recognised, most patients do not suffer any problems.

**Common (greater than 1 in 10)**
- A small amount of scrotal bruising.
- No guarantee that sperm will return to the semen (more likely with increasing age).
- Pregnancy is not always achieved, even though sperms are present.
- Miscarriage rate of 15 to 20%; this is no greater than the risk in the normal population.
- Blood in the semen for the first few ejaculations.

**Occasional (between 1 in 10 and 1 in 50)**
- Bleeding needing further surgery.
- Chronic testicular pain (5%) or sperm granuloma (painful nodule at the operation site).
- 5% of reversals (1 in 20) stricture off each year after the procedure, resulting in no sperms being ejaculated.

**Rare (less than 1 in 50)**
- Rarely, inflammation or infection of the testes or epididymis requiring antibiotics.
- Inability to perform the procedure on one or both sides.

**Hospital-acquired infection**
- Colonisation with MRSA (0.9% - 1 in 110).
- MRSA bloodstream infection (0.02% - 1 in 5000).
- Clostridium difficile bowel infection (0.01% - 1 in 10,000).

The rates for hospital-acquired infection may be greater in high-risk patients, for example those patients

- with long-term drainage tubes;
- who have had their bladder removed due to cancer;
- who have had a long stay in hospital; or
- who have been admitted to hospital many times.
What should I expect when I get home?

When you are discharged from hospital, you should:

- be given advice about your recovery at home;
- ask when you can begin normal activities again, such as work, exercise, driving, housework and sex;
- ask for a contact number if you have any concerns once you return home;
- ask when your follow-up will be and who will do this (the hospital or your GP); and
- be sure that you know when you get the results of any tests done on tissues or organs that have been removed.

When you leave hospital, you will be given a “draft” discharge summary. This contains important information about your stay in hospital and your operation. If you need to call your GP or if you need to go to another hospital, please take this summary with you so the staff can see the details of your treatment. This is important if you need to consult another doctor within a few days of being discharged.

Over the first few days, your scrotum and groins will become a little uncomfortable and bruised. It is not unusual for the wound to appear swollen and weepy in the early days; if you are at all worried about this, you should contact your GP. Your skin sutures do not need to be removed and will usually drop out after a couple of weeks. Occasionally, they may take slightly longer to disappear.

You are advised to take 10 to 14 days off work after the operation and not to have sex until you feel completely comfortable.

What else should I look out for?

If you develop a temperature, increased redness, throbbing or drainage at the site of the operation, please contact your GP.

Are there any other important points?

You will be asked to produce two sperm counts 6 to 12 weeks after the operation. On average, sperms take two to six months to appear in the semen, although this sometimes takes as long as a year. If you have no sperms in the first two samples, they are not likely to appear at a later date. The average time between surgery and conception is 12 months so you should not have the operation if you want to wait longer than this to start a family.

Even if sperms are produced in the semen, you may still not be able to produce a pregnancy. This is because your sperms may be poor quality or because you have formed antibodies to your own sperms. In some men who get positive sperm counts, the tubes may block off at a later stage although it may be possible to repeat the operation if this happens.

Vasectomy reversal is not available on the NHS and usually needs to be performed privately. The total cost for the procedure can be obtained from your urologist or GP. This will not be covered by any private medical insurance you may have.
The chances of success are related to the time which has passed since the original vasectomy; they are shown in the table below:

<table>
<thead>
<tr>
<th>Interval (years)</th>
<th>Patency rate</th>
<th>Pregnancy rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 3</td>
<td>97%</td>
<td>75%</td>
</tr>
<tr>
<td>3 to 8</td>
<td>88%</td>
<td>50 to 55%</td>
</tr>
<tr>
<td>9 to 14</td>
<td>79%</td>
<td>40 to 45%</td>
</tr>
<tr>
<td>15 to 19</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td>More than 19</td>
<td>40%</td>
<td>Less than 10%</td>
</tr>
</tbody>
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Driving after surgery
It is your responsibility to make sure you are fit to drive following your surgery. You do not normally need to tell the DVLA that you have had surgery, 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 give you advice on this.

Is any research being carried out in this area?
Before your operation, your surgeon or specialist nurse will tell you about any relevant research studies taking place. In particular, they will tell you if any tissue that is removed during your surgery will be stored for future study. If you agree to this research, you will be asked to sign a special form giving your consent.

All surgical procedures, even those not currently undergoing research, are audited so that we can analyse our results and compare them with those of other surgeons. In this way, we learn how to improve our techniques and results; this means that our patients will then get the best treatment available.

What should I do with this information?
Thank you for taking the trouble to read this booklet. If you want to keep a copy for your own records, please sign below. If you would like a copy of this booklet filed in your hospital records for future reference, please let your urologist or specialist nurse know. However, if you do agree to go ahead with the scheduled procedure, you will be asked to sign a separate consent form that will be filed in your hospital records; we can give you a copy of this consent form if you ask.

I have read this booklet and I accept the information it provides.

Signature............................................... Date.........................................
How can I get information in alternative formats?
Please ask your local NHS Trust or PALS network if you require this information in other languages, large print, Braille or audio format.

Most hospitals are smoke-free. Smoking can make some urological conditions worse and increases the risk of complications after surgery. For advice on stopping, contact your GP or the free NHS Smoking Helpline on 0800 169 0 169

Disclaimer
While we have made every effort to be sure the information in this booklet is accurate, we cannot guarantee there are no errors or omissions. We cannot accept responsibility for any loss resulting from something that anyone has, or has not, done as a result of the information in this booklet.

The NHS Constitution
Patients’ Rights & Responsibilities

Following extensive discussions with staff and the public, the NHS Constitution has set out new rights for patients that will help improve your experience within the NHS. These rights include:

- a right to choice and a right to information that will help you make that choice;
- a right to drugs and treatments approved by NICE when it is considered clinically appropriate;
- a right to certain services such as an NHS dentist and access to recommended vaccinations;
- the right that any official complaint will be properly and efficiently investigated, and that patients will be told the outcome of the investigations; and
- the right to compensation and an apology if you have been harmed by poor treatment.

The constitution also lists patients’ responsibilities, including:

- providing accurate information about their health;
- taking positive action to keep yourself and your family healthy.
- trying to keep appointments;
- treating NHS staff and other patients with respect;
- following the course of treatment that you are given; and
- giving feedback (both positive and negative) after treatment.

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