Reversal of vasectomy: procedure-specific information

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 GP or other healthcare professionals. Alternative treatments are outlined below and can be discussed 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?
Other forms of assisted conception, sperm aspiration.

Vasectomy reversal is ideal for men in whom the vasectomy was performed less than 15 years ago, in couples who wish to have more than one child and where the female partner is young.

Sperm aspiration and artificial fertilisation will involve your partner in some manipulation as well, to retrieve eggs. The complications of sperm aspiration include haematoma of the scrotum (<5%), infection (1%) and shrinkage of the testicle (<5%). There is a 5-30% risk of multiple pregnancy following artificial fertilisation although there is no evidence of any increased risk of congenital malformation. Overall, the pregnancy rate is approximately 25-30% but this usually requires several cycles of treatment to reach these figures.

Assisted conception is only performed by the Department of Reproductive Medicine (at Addenbrooke's) & by Bourn Hall. It is their recommendation that, in most patients, vasectomy reversal is the most effective method of producing a pregnancy after a previous vasectomy.

What should I expect before the procedure?
You will usually be admitted on the same day as your surgery. You will normally receive an appointment for pre-assessment, approximately 14 days before your admission, 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, the Anaesthetist and your named nurse.
You will be asked not to eat or drink for 6 hours before surgery and, immediately before the operation, you may be given a pre-medicaiton by the anaesthetist which will make you dry-mouthed and pleasantly sleepy.

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 or Clopidogrel (Plavix®)
- 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?

Either a full general anaesthetic (where you will be asleep throughout the procedure) or a spinal anaesthetic (where you are awake but unable to feel anything from the waist down) will be used. All methods minimise pain; your anaesthetist will explain the pros and cons of each type of anaesthetic to you.

The operation is normally performed through a small incision in the front of the scrotum with the ends of the tubes being re-joined using microsurgical techniques. If it is not possible to re-join the divided ends, it may still be possible to join the upper end to the sperm-carrying mechanism (epididymis) although the results of this procedure are not as good as those from re-joining the vasa themselves.
What happens immediately after the procedure?
You may experience discomfort for a few days after the procedure but painkillers will be given to you to take home. Absorbable stitches are normally used which do not require removal.

The average hospital stay is less than 1 day.

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 1 in 10)
- A small amount of scrotal bruising
- No guarantee that sperm will return to the semen (this more likely with increasing age)
- Although sperm may return, pregnancy is not always achieved
- If storing sperm, check that the appropriate forms have been signed
- Miscarriage rate of 15-20%; 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 requiring 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 (overall risk for Addenbrooke’s)
- Colonisation with MRSA (0.02%, 1 in 5,000)
- Clostridium difficile bowel infection (0.04%; 1 in 2,500)
- MRSA bloodstream infection (0.01%; 1 in 10,000)

(These rates may be greater in high-risk patients e.g. with long-term drainage tubes, after removal of the bladder for cancer, after previous infections, after prolonged hospitalisation or after multiple admissions)
What should I expect when I get home?
Over the first few days, the scrotum and groins invariably become a little uncomfortable and bruised. It is not unusual, after a few days, for the wound to appear swollen and slightly weepy. If you are at all worried about this, you should contact your GP. The 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 10-14 days off work after the operation and to avoid sexual intercourse 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 6-12 weeks after the operation. On average, sperms take 2-6 months to appear in the semen, although this may take as long as a year. If sperms are not present in the first two samples, however, they are not likely to appear at a later date. The average post-operative time to conception is 12 months so you should not have the operation performed if you do not want to produce a family for a longer period than this.

Even if sperms are produced in the semen, you may still not be able to produce and pregnancy, either because the sperms are of poor quality or because you have formed antibodies to your own sperms.

Unfortunately, in some men who get sperms going through initially, the tubes block off at a later stage so that pregnancy is not possible; it may, however, be possible to repeat the operation at a later date if this occurs.

Vasectomy reversal is not available on the NHS and must be performed privately. The total cost (package price) for vasectomy reversal is £1954 for a day-case admission; to this you must add the initial consultation fee of £120 which is payable whether your proceed with the operation or not.
The chances of success 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>&lt;3</td>
<td>97%</td>
<td>75%</td>
</tr>
<tr>
<td>3 – 8</td>
<td>88%</td>
<td>50 – 55%</td>
</tr>
<tr>
<td>9 – 14</td>
<td>79%</td>
<td>40 – 45%</td>
</tr>
<tr>
<td>15 – 19</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td>&gt;19</td>
<td>40%</td>
<td>&lt;10%</td>
</tr>
</tbody>
</table>

**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 3 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.

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

There is no specific research in this area at the moment but all operative procedures performed in the department are subject to rigorous audit at a monthly Audit & Clinical Governance meeting.

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

**Oncology Nurses**
- Uro-Oncology Nurse Specialist  
  01223 586748
- Bladder cancer Nurse Practitioner (haematuria, chemotherapy & BCG)  
  01223 274608
- Prostate cancer Nurse Practitioner  
  01223 247608 or 216897 or bleep 154-548
- Surgical Care Practitioner  
  01223 348590 or 256157 or bleep 154-134

**Non-Oncology Nurses**
- Urology Nurse Practitioner (incontinence, urodynamics, catheter patients)  
  01223 274608 or 586748
- Urology Nurse Practitioner (stoma care)  
  01223 349800

**Patient Advice & Liaison Centre (PALS)**
- Telephone  
  +44 (0)1223 216756 or 257257
What should I do with this form?
Thank you for taking the trouble to read this information sheet. 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 form 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 information sheet and I accept the information it provides.

Signature........................................Date........................................

How can I get information in alternative formats?
Please ask if you require this information in other languages, large print or audio format: 01223 216032 or patient.information@addenbrookes.nhs.uk
Addenbrooke’s is smoke-free. You cannot smoke anywhere on the site. Smoking increases the severity of some urological diseases and increases the risk of post-operative complications. For advice on quitting, contact your GP or the NHS smoking helpline free on 0800 169 0 169

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**Polish** Informacje te można otrzymać w innych językach, w wersji dużym drukiem lub audio. Zamówienia prosimy składać pod numerem: 01223 216032 lub wysyłając e-mail: patient.information@addenbrookes.nhs.uk

**Portuguese** Se precisar desta informação num outro idioma, em impressão de letras grandes ou formato áudio por favor telefone para o 01223 216032 ou envie uma mensagem para: patient.information@addenbrookes.nhs.uk

**Russian** Если вам требуется эта информация на другом языке, крупным шрифтом или в аудиоформате, пожалуйста, обращайтесь по телефону 01223 216032 или на вебсайт patient.information@addenbrookes.nhs.uk

**Cantonese** 若你需要此信息的其他语言版本、大字體版或音頻格式，請致電 01223 216032 或發郵件到: patient.information@addenbrookes.nhs.uk

**Turkish** Bu bilgiyi diğer dillerde veya büyük baskıya da sesli formatta isteresiniz lütfen su numaradan kontak kurun: 01223 216032 veya asagıdaki adrese e-posta gönderin: patient.information@addenbrookes.nhs.uk

**Bengali** এই তথ্য বাংলায়, বড় অক্ষরে বা অডিও টেপে পেতে চাইলে দিয়া করে 01223 216032 নম্বরে ফোন করুন বা patient.information@addenbrookes.nhs.uk থেকে ই-মেইল করুন।