Reversal of Vasectomy

Rejoining of the previously separated tubes with microsurgical techniques and fine sutures

This patient information leaflet is drawn from the consensus panels of many worldwide urological societies, as a supplement to any advice that you may already have been given. Alternative treatments are outlined below and can be discussed in more detail with Dr Campbell.

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 fertilization 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 fertilization 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.

Before the procedure

Please be sure to inform Dr Campbell in advance of your procedure if you have any of the following:

- ~An artificial heart valve
- ~A coronary artery stent
- ~A heart pacemaker or defribrillator
- ~An artificial blood vessel graft
- ~A neurosurgical shunt
- ~Any other implanted foreign body

- \sim Blood thinning medications, particularly
 - ~Asasantin
 - ~Aspirin
 - ~ Fish oil
 - ~Iscover
 - $\sim \text{Persantin}$
 - ~ Plavix
 - ~ Warfarin
- ~ Angina
- $\sim {\rm Hypertension}$
- \sim Diabetes
- ~ Recent heart attack

You will usually be admitted on the day of surgery. You may be asked to attend a pre-admission clinic 5–10 days before the procedure to assess your general fitness and to perform some baseline investigations.

If you are taking warfarin, Clopidogrel, iscover, asaantin, or persantin on a regular basis, you must discuss this with Dr Campbell because these drugs can cause increased bleeding after surgery. There may be a balance of risk where stopping them will reduce the chances of bleeding but this can result in increased clotting, which may also carry a risk to your health. This will, therefore, need careful discussion with regard to risks and benefits.

You will be asked not to eat or drink for 6 hours before surgery. Immediately before the operation, you may be given a pre-medication by the anaesthetist which will make you dry-mouthed and pleasantly sleepy.

After admission, you will be seen by members of the urological team which may include not only Dr Campbell, but the specialist registrar, the intern, and your named nurse. The specialist registrar may perform your procedure in conjunction with Dr Campbell and with your permission.

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Where do I go for my procedure?

The admissions section of the hospital at the appointed time, on the appointed day. The admissions section of the particular hospital will give you instructions well in advance of the operation.

If no contact has been made telephone Dr Campbell's secretary on (07) $3367\,1608,$ and the problem will be addressed.

Do I need to do anything special before my procedure?

You will need to not drink or eat anything for 6 hours prior to the procedure.

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. Both methods minimize pain; your anaesthetist will explain the pros and cons of each type of anaesthetic to you.

The operation is normally performed through two small bilateral scrotal incisions. The incisions are made to the side of the scrotum. On some occasions in order to achieve adequate exposure the incisions need to be enlarged. The ends of the tubes are located and 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.

The operation takes approximately 2–3 hours to complete.

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 2 days.

Are there any side-effects?

Most procedures have a potential for side-effects and these are outlined below. Please use the check circles 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 will increasing age)
- ~ Although sperm may return, pregnancy is not always achieved
- ~ Miscarriage rate is 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 & 1 in 50)

- ~ Bleeding requiring further surgery
- ~ Chronic testicular pain (5%) or sperm granuloma (painful nodule at the operation site)

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

General side-effects of any procedure

Any operative procedure that involves regional (spinal) or general anaesthetic can have side-effects. These are explained in the leaflet on anaesthesia.

Hospital-acquired infection

- ~ Colonisation with MRSA (0.9%, 1 in 110)
- ~ Clostridium difficile bowel infection (0.2%; 1 in 500)
- ~ MRSA bloodstream infection (0.08%; 1 in 1,250)

(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)

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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 worried about this, you should contact the rooms or your family doctor. 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 & 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 Dr Campbell.

For after hours emergencies Dr Campbell can be contacted on (o_7) 3367 1608.

The Wesley Hospital Emergency Centre (07) 3232 7333, and The Greenslopes Private Hospital Emergency Centre (07) 3394 7111 are other resources that are also available.

Is there any research being carried out in this field?

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

Are there any other specific 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 postoperative 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 mat still not be able to produce a 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.

The chances of success are shown in the table below:

Interval (years)	Patency Rate	Pregnancy Rate
< 3	97 [%]	75 [%]
3–8	88%	50-55%
9-14	79%	40-45%
15–19	70%	30%
> 19	4,0%	< 10%

Reversal of Vasectomy continued...

Who can I contact for more help or information? Dr Peter Campbell Suite 9, level 9, Evan Thomson Building, The Wesley Hospital, Chasely St, Auchenflower, QLD 4066 (07) 3367 1608, www.campbellurology.com.au The Wesley Hospital, Urology Ward 451 Coronation Drive, Auchenflower, QLD 4066 (07) 3232 7168 www.uhc.com.au/wesley	The Queen Elizabeth II Jubilee Hospital, Urodynamics Department Kessels Rd, Coopers plains, QLD 4108 (07) 3275 6346American Urological Association Foundation 1000 Corporate Blvd, Suite 410, Linthicum, MD 21090 1800 828 7866 www.UrologyHealth.org
The Wesley Emergency Centre 451 coronation Drive, Auchenflower, QLD 4066 (07) 3232 7333	
Greenslopes Private Hospital, Continence Advisor Newdgate St, Greenslopes, QLD 4120 (07) 3394 7978 www.greenslopesprivate.com.au	
Greenslopes Private Hospital Urology Ward Newdgate St, Greenslopes, QLD 4120 (07) 3394 7261 www.greenslopesprivate.com.au	
Greenslopes Private Hospital Emergency Centre Newdgate St, Greenslopes, QLD 4120 (07) 3394 6777 www.greenslopesprivate.com.au	

Thank you for taking the trouble to read this information sheet. If you are satisfied with the explanation of the test, please sign below and this leaflet will be filed in your chart.

If you wish to retain a copy for you own records, one will be provided.

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

Signature

Date