

VASECTOMY REVERSAL by Dr Robert Woolcott

Expertise and Experience Matter

Dr Robert Woolcott provides the experience, knowledge and expertise required to give you the highest possible chance of successful Vasectomy Reversal.

Dr Woolcott is one of a very limited number of fully qualified Reproductive Microsurgeons in Australia. He and his surgical team use state of the art techniques to maximise success.

He is a Royal Australian College certified sub-specialist in Reproductive Microsurgery and Infertility. He actively participates in research programs, frequently publishing in medical and scientific journals. As a member of the Board of Directors of the Hunter Post Graduate Medical Institute he maintains an active interest in promoting education and training of other medical practitioners. He has been awarded both the Chris Hudson Fellowship and the Brown Craig Travelling Fellowship, which enabled furthering of his studies and experience at Yale University, USA. With membership of the Fertility Society of Australia, The American Society for Reproductive Medicine and The European Society for Human Reproduction and Embryology he is well equipped to provide you with advice and assistance with the latest technology developments.

Dr Woolcott understands that you will individually need a personalized approach. He will consider your unique medical history and provide advice specifically suited to your circumstances. Vasectomy reversal procedures are performed at Strathfield Private Hospital in Sydney and Lingard Private Hospital in Newcastle.

Things to consider prior to Vasectomy Reversal

Surgical expertise and experience

There is no doubt that the most important issue that you should take into consideration is the skill and experience of the surgeon who performs your vasectomy reversal. Dr Woolcott is a full time fertility specialist who concentrates on reproductive microsurgery. He is continually performing vasectomy reversal procedures. He has a dedicated surgical team who exclusively assist him in performing vasectomy reversals - the same staff doing the same procedures, all of the time, means maximum expertise and experience available to you.

Reasons for vasectomy reversal

Achieving a pregnancy is obviously by far the most common reason for wishing to have a vasectomy reversal - but it is not the only one. Long-term pain following prior vasectomy, while uncommon, does occur (so called Post-Vasectomy Syndrome). Vasectomy reversal has a greater than 50% chance of relieving or reducing such pain and is a worthwhile indication. On the other hand there is no evidence that physical sexual dysfunction is caused by vasectomy - so reversal will have no beneficial effect.

Time since your vasectomy

There is little doubt that the length of time since your vasectomy is an important factor influencing the ultimate success of your vasectomy reversal. The longer the duration of time since vasectomy the lower the overall chance of achieving a pregnancy. Scientific studies vary in their reported effect on outcome. While trained Reproductive Microsurgeons such as Dr Woolcott achieve patency rates of the Vas Deferens in excess of 98% (as measured by sperm being present in semen), there is however an obvious decline in pregnancy rates when the vasectomy was performed more than 12 years prior to the reversal. This effect becomes quite marked beyond 20 years.

Sperm antibodies

Sperm antibodies are produced after exposure of sperm to the immune system. This not uncommonly occurs following vasectomy. The presence of high level sperm antibodies may reduce pregnancy rates following vasectomy reversal. In general however their presence is of less significance than other factors listed here.

Medical history

It is important to be aware of your general state of health prior to any surgical procedure. There are a variety of conditions which may effect the outcome of your operation. In particular any trauma, infection or disease involving the scrotum, penis, prostate gland or pelvic organs. Cardiovascular, respiratory and neurological disease may also be of major significance for your anaesthetic. Smoking has been shown to reduce fertility by affecting sperm function as a result of toxins. Please ensure that Dr Woolcott is made fully aware of your past medical history at the time of your pre-operative consultation.

Age

Obviously the older you are the more likelihood that you may have some additional medical problem which may influence that safety of surgery or the chance of complications. In addition many people will think about the difference in age between parent and child as you get older.

Your partner's age and health

The single most important factor influencing the prospect of successful pregnancy following vasectomy reversal has nothing to do with the surgery itself or for that matter the man undergoing vasectomy reversal. It is the your partner's age.

The prospect of successful pregnancy dramatically declines with female age. For healthy previously fertile women over the age of 40 years the total probability of successful pregnancy is not greater than 40%. Indeed miscarriage rates at age 40 are 40% per pregnancy.

The Alternative

The alternative to vasectomy reversal is in vitro fertilisation (IVF).

IVF is complex treatment aimed at producing pregnancies by fertilising eggs and sperm outside the body in the laboratory. The medication, monitoring and procedures that your partner will have to go through are considerable. Decisions regarding which of Vasectomy Reversal or IVF are personally best for you may require careful consideration and depend on your individual circumstance. It requires the extraction of sperm from the tubules next to the testis (epididymis) or directly from the testis by needle aspiration of direct biopsy. There are too few sperm obtained by this method for simple insemination and so IVF is always necessary. Following sperm aspiration it is no longer practical to have a vasectomy reversal due to damage to the epididymis.

Surgical Technique

Pre-operative preparation

Following consultation and consideration of the benefits, disadvantages, complications and pregnancy rates of vasectomy reversal, we will arrange admission to hospital. You should inform our anaesthetist of any past or present medical problems, medications you are taking and of any allergies. You should not have anything to eat or drink from the evening before your surgery.

Skin incision

To perform a vasectomy reversal two incisions of about 2.5cm are made on either side of the scrotum above the testes. These permit access to the scrotal contents including the vas deferens, testes and epididymis.

Scrotal exploration

This involves manually identifying the structures of the scrotum, in particular making note of the vas deferens and the site of the previous vasectomy. The amount of vas deferens which is absent or damaged is assessed along with the available length remaining for re-anastomosis. Occasional so much vas deferens has been damaged that it is necessary to consider a different surgical technique called microsurgical vaso-epididymostomy. Provided that the anatomy remains acceptable and there is sufficient vas deferens remaining a decision is made to proceed to dissecting the vas deferens for reversal.

Dissection of the Vas Deferens

Following exploration to assess suitability for reversal (which is almost always possible), the vas deferens is then dissected free of the surrounding tissue. The area of the prior vasectomy usually remains adherent within scar tissue - it is however universally possible to identify normal vas deferens on either side of the vasectomy site. Having freed the vas deferens it is then cut on either side of the vasectomy site so that a normal open tube is available for re-anastomosis of each end.

Microsurgical re-anastomosis

The cut ends of the vas deferens are brought into close proximity with each other and stabilised in position by a small atraumatic clip. An operating microscope is then used to magnify the site of the microsurgery approximately 40 times. A series of very fine microscopic sutures (much finer than a human hair) are then placed around the circumference of the lumen of the vas deferens (which is less in diameter of a pin) to bring the ends together and establish patency (microsurgical vaso-vasostomy). Once this has been achieved a second layer of sutures is then added to provide support and stability to the site of the anastomosis. These secondary sutures reduce the risk of movement and therefore excess scarring following the operation. It is always possible to visibly see the ends of the vas deferens come together and be certain at the time of the surgery that the vas deferens is open.

When microsurgical epididymostomy is necessary the vas deferens is attached to the epididymis by a series of circumferential sutures which are even finer than those used for vaso-vasostomy.

Skin Closure

Once the microsurgery is finished the scrotum is closed in two layers: the first an inner continuous suture to bring the subcutaneous tissues together, and then the skin edges are brought together and closed by a series of very fine interrupted stitches. So that accumulating fluid does not place tension on the site of the anastomosis a small soft drain is placed. It is removed the next morning.

Recovery after vasectomy reversal

Post operative care

Recovery is generally rapid with virtually all patients leaving hospital within 24 hours of vasectomy reversal. There will be some discomfort from the operation site. Usually a drain will be placed on either side of the scrotum to limit the possibility of a collection of blood underneath the wound. As the stitches used to close the skin are very delicate it is uncommon for them to cause any problems. Gentle washing the area of the operation is permitted the day after surgery. Padding is usually placed within firm fitting underwear for support.

At home after your vasectomy reversal

Once you go home from hospital after your vasectomy reversal you should be prepared to rest. Watching television or videos is a sensible past time for the first week. Having someone to assist you for the first week would be wise particularly if your home has a staircase or is situated on an incline. In the second week post operation light physical activity is reasonable. You can aim to return to normal physical activities about 4 weeks after your reversal.

Physical activity

It is important to take care with physical activity for 2 to 3 weeks following your vasectomy reversal. Excessive movement of the site of your surgery may place tension on the very fine suture which hold the ends of the vas deferens together. From the perspective of healing any movement between the ends of the anastomosis of the vas deferens may lead to abnormal circumferential scarring and so increase the chance of occlusion of the vasectomy reversal. Common sense is important - you should only undertake light physical activity during this early recovery phase. The essential rule is: "If it hurts - do not do it".

Sexual activity

The same rules apply to sex. It should be avoided for 4 weeks after your vasectomy reversal.

Going back to work

Most can return to work within 2 weeks of vasectomy reversal. Some people who work in sedentary occupations could do so earlier.

Possible side effects and complications

While side effects and complications are uncommon, they do occasionally occur. These include:

Wound haematoma The most common complication is a collection of blood in the scrotum around the site of the operation due to the leaking post-operatively of the microscopic blood vessels which can be damaged at the time of the surgery. It is unfortunately not possible to tie all these vessels off as they often go into spasm once they are cut and bleeding only restarts some time after the operation is completed. The use of drains in the scrotum dramatically reduces the incidence of this problem.

Swelling It is common for the scrotum to appear 1 1/2 to 2 times larger than normal after the operation due to tissue fluid engorging the area. This generally rapidly subsides without great difficulty. Occasionally walking is a problem until it has subsided.

Pain Pain after this operation is uncommon although it can occur. Simple analgesics such as Panadol or Digesic (but not Aspirin) are recommended. Unfortunately in some men discomfort can persist for up to 6 months.

Infection This is exceptionally rare, but should there be any dramatic increase in swelling or pain after the operation, you should contact this surgery and antibiotics will most likely be prescribed. Unfortunately any operation that opens the body to the atmosphere can have bacteria contaminate it and lead to infection.

Clots in the legs As this operation is a long operation due to its microsurgical and delicate nature, occasionally young men can still develop clots in the legs which can, on rare occasions, travel to the lungs. This is an exceptionally rare complication.

Please contact us if you have any questions or concerns or if you think you may have developed a complication of surgery.

Success Rates and Results

Normal Fertility

A very important issue to consider when assessing pregnancy rates from vasectomy reversal is that of normal fertility rates. When reading of extravagant claims made elsewhere on the internet about baby rates following vasectomy reversal it is important to be aware that the normal chance of a young couple (female age under 30 years) of successfully achieving a pregnancy within one year of starting to attempt to do so is 85%. For the average couple trying to achieve a pregnancy (female age >30 years) the chance of pregnancy is 80% in 1 year.

Patency Rates

Technical success from microsurgical vasectomy reversal is excellent with over 98% of men who undergo the operation having sperm in the semen. There is however a difference between technical success as measured by sperm as opposed to practical success as measured by pregnancies.

Pregnancy Rates

One of the more important factors influencing the pregnancy related success rate is the duration of time since the previous vasectomy. The greater the time since the vasectomy, the lower the chance of a successful reversal. This is due to back pressure effects on the testis causing damage to sperm production. In addition the very fine tubules (epididymis) just next to the testis develop damage from this pressure and they often break open and then scar over so that there is a second blockage very close to the testis. Sperm antibodies can also develop as a result of a vasectomy. This is more commonly if the epididymis breaks open as a result of back pressure. The presence of sperm antibodies will reduce these pregnancy rates.

- Less than 3 years since vasectomy: 77% pregnancy
- 3 to 8 years since vasectomy: 53% pregnancy
- 9 to 14 years since vasectomy: 44% pregnancy
- Greater than 15 years since vasectomy: 30% pregnancy.

While there are those who claim pregnancy rates following vasectomy reversal that exceed normal fertility rates, it is not possible to produce pregnancy rates greater than the normal chance of pregnancy of a fertile couple.

Claims that pregnancy rates following vasectomy reversal exceed 80% - thus making the claim that it is possible to improve on normal fertility - should be viewed with considerable suspicion.

If sex fails to achieve a pregnancy all is not lost. As most men have sperm in their semen these can be concentrated artificially and used for either intra-uterine insemination or In Vitro Fertilisation. The advent of the technique known as Intracytoplasmic Sperm Injection has dramatically improved pregnancy rates for those who fail to achieve pregnancy normally or who have very low sperm numbers or motility following the operation.

Take Home Baby Rates

The single most important factor influencing pregnancy rates and take home baby rates following vasectomy reversal is female age. The older your partner's age the lower the chance of successful pregnancy. It is wise to take into consideration that as a result of the occurrence of miscarriage that "take-home-baby" rates will be less than pregnancy rates. The most important factor influencing the chance of miscarriage is also female age - the older your female partner the higher the chance of miscarriage.

Maximising your prospect of pregnancy after Vasectomy Reversal

There are a range of simple things that can be done to help your chances of achieving a pregnancy following Vasectomy Reversal. Some are discussed here.

Healthy Eating & Diet

There is a lot of information in women's and health magazines about health in general and alternative health supplements such as herbal medicines and high dose vitamins (e.g. zinc, selenium) which might improve fertility. In general, however the average Australian diet contains most of the necessary ingredients (with the possible exception of folate - see below) to ensure adequate reproductive function. Provided you include a balanced amount of food from all the major groupings you should not need to worry about supplements and herbal preparations. If you are in any doubt a broad spectrum vitamin and mineral capsule, taken one a day, for men and women, will ensure a proper nutritional supply.

Folate

Folate (Folic Acid) is a B group vitamin. It is essential for the replication of cells and the production of the basic building blocks of life (DNA). It has been shown that women who have diets low in folate have a higher risk of having babies with a serious combination of congenital abnormalities called neural tube defects, examples of which are Spina Bifida and Hydrocephalus (water on the brain). Taking Folate supplements dramatically reduces this risk. While it is possible to gain sufficient folate from your diet by eating lots of green leafy vegetables such as broccoli and lettuce, it is recommended that all women attempting to achieve a pregnancy take 0.5mg of folate daily (ask your pharmacist). Those couples with a family history of these abnormalities should take 10 times this dose at 5mg of folate daily.

Smoking and alcohol

There is no doubt that smoking or the consumption of moderate quantities of alcohol is bad for your general health. Equally it is bad for fertility and reproductive capacity in both men and women. Smoking reduces the chance of achieving a pregnancy both naturally and from any treatment. It should be stopped before attempting to get pregnant. Alcohol in more than minor amounts is also harmful. It has been shown that alcohol in moderate or large amounts (more than 3 standard drinks per day) is associated with an increase risk of congenital abnormality in babies. Only minimal

social drinking of alcoholic beverages (averaging less than 2 standard drinks per day) should occur while trying to get pregnant or while pregnant. You should not binge drink at all (5 or more standard drinks on any one day).

Exercise

Generally, anything that increases your overall health improves your reproductive capacity. The rule applies to exercise, with the exception of elite athletes. Regular exercise is always recommended. Thirty minutes a day, or 40 minutes every other day is appropriate. Swimming, walking running, cycling etc.... are all recommended. The key is to exercise regularly. You do not have to train to be an Olympic athlete, just get out and do something most days of the week. Some elite athletes train to the extent that they lower their body fat to a point that their brain perceives them as not having sufficient to reproduce and then it shuts down the reproductive processes. This can stop ovulation or sperm production. Generally women under 50kg and men under 60kg should be aware of this possibility and seek specialist advice.

Sex

Clearly some knowledge of normal sexual function and how this might affect your chance of achieving a pregnancy is important. One thing is certain - the more often you have sex the higher the chance of conceiving. This is based on scientific research and addresses the issue of timing. We know that sex prior to ovulation is more likely to lead to pregnancy than post-ovulatory sex. Most often, couples who try to pick the best time to have sex to achieve a pregnancy actually go past the most fertile time and this leads to having sex after ovulation. Other common issues are that sexual position does not affect the chance of pregnancy and female orgasm can improve sperm transport but is not essential for pregnancy to occur.

Financial Matters – The cost of Vasectomy Reversal

Dr Robert Woolcott and his team are committed to providing vasectomy reversal at reasonable cost.

As a result of an agreement between the hospitals, anaesthetists, assistant surgeons and Dr Woolcott which allows for control of operating costs limiting the expense of the procedure. The Australian government has recently reintroduced a Medicare for the procedure which simultaneously permits or health insurance rebates which further reduces your out of pocket expense

Cost of Vasectomy Reversal

Please refer to the finance page on our website for up to date information on the cost of your vasectomy reversal

Payment Methods

We provide a complete package whereby Dr Woolcott's staff collect fees on behalf of your anaesthetist, the assistant surgeon as well as surgical fees. As a result of an agreement to simplify billing, payment is due at time of scheduling your vasectomy reversal.

Payment can be made by Bank cheque, EFTPOS or Credit card (Visa or MasterCard)

Arrange Your Reversal

Because of the practicalities of organising suitable times and dates, making an appointment for a consultation is often best done by telephone.

*From within Australia you may make your appointment for consultation by telephone: **1300 307 166.***

For international patients (from outside Australia), please telephone by dialling your international access code then 61 2 49086555.

A referral from your General Practitioner is necessary.

Please bear in mind appointments for consultations are generally booked out for approximately 3 to 6 weeks ahead. It may be necessary to discuss with our secretaries the most appropriate timing for a consultation. For those coming from some distance often your consultation can be arranged the day before surgery. A number of potential options may need to be considered, depending on your work and personal commitments.

Transport to our offices

Sydney

By Air

Sydney's Kingsford Smith airport is approximately 12 Km south of the CBD. There is easy transport into the central business district by taxi, rail and bus. Qantas, Virgin Blue and Jetsar all have frequent services from all parts of Australia. There are more than 100 international airlines that fly into Sydney.

By Car

Our offices are in the north eastern area of the Sydney CBD, close to Circular Quay. When travelling by car head for the eastern edge of the CBD near the State Parliament and Macquarie Street. There are numerous parking stations within 400 metres.

By Public Transport

There are ample train and bus services from all parts of both the Sydney metropolitan area and regional New South Wales to the Sydney central business district.

Newcastle

By Air

The region's major airport is Newcastle Airport (at Williamstown) and it is serviced by *QantasLink* from Sydney, Brisbane, Melbourne and Gold Coast as well as several regional NSW centres, *Virgin Blue* offers daily flights from Melbourne, Brisbane and

the Gold Coast and *Aeropelican* provides services provided commuter flights from Sydney. Newcastle Airport is also serviced by *Brindabella Airlines*.

By Road

The F3 freeway (National Highway 1) is the main access route from Sydney to the Hunter - within 2 hours you can be in Newcastle CBD. The Pacific and New England Highways are the main routes from Queensland.

By Rail

CityRail offers daily frequent commuter rail services to Newcastle and the lower Hunter. *CountryLink* trains link the Hunter with Sydney and Brisbane.

By Bus or Coach

Greyhound Pioneer and *McCafferty's* operate daily between Sydney and the Hunter.

Privacy and Confidentiality

Your confidentiality is important to us.

Dr Woolcott and his staff value and respect your privacy and strictly adhere to federal and state privacy legislation.

We collect information of a private and confidential manner from you primarily to provide proper care and treatment. We have a legal and ethical duty to protect patient information. However, patient information may have to be disclosed to other doctors, nurses, therapists, medical technicians and hospital staff so that health care is not compromised.

We collect information regarding your health and relevant social circumstances, collecting only information necessary to provide health care to you. Once collected, this information will be dictated, typed and then sent to your referring doctor. Our secretarial staff who will also collect relevant personal details and type the reports, do so with strict confidentiality.

This information may be provided to other doctors or hospitals with whom you become involved in the future and who may require information that is relevant to your health care. It may also be provided to doctors who have been involved in your health care, may have performed procedures, are interested in quality assurance or may request information as to your well being.

Information on your health is otherwise private and confidential and not released to anyone without your authorization. You have the right of access to documents and to correct any information that you feel is inaccurate.

We may require your consent to obtain relevant details regarding your previous history and any other information that may influence your treatment.

Our web site is intended for information only - Disclaimer

While providing a useful source of practical and theoretical detail on the management of infertility and related conditions the information contained on this web site is not intended to be a substitute for a consultation with a qualified medical specialist. Please note we do not provide responses to specific personal medical concerns nor do we provide additional printed information other than that already available of this website. Decisions regarding treatment should only be made after discussion with your doctor. While every effort is made to ensure all information contained within this website is accurate and up to date, no guarantee is made nor implied to its accuracy.