THE METROCENTRE WAY

VASECTOMY REVERSAL





HOW THE VASECTOMY REVERSAL IS PERFORMED AT METROCENTRE

The vasectomy reversal treatment is a highly viable option for men who have previously undergone a vasectomy and want to reduce post-congestion pain and/or have a child.

The Owen 3-Layer Microsurgical Vasectomy Reversal (the highly precise technique used at Metrocentre) is one of the few options available for men who have previously undergone a vasectomy and are now seeking to have children – IVF is generally the only other option available.

A typical Owen 3-Layer Microsurgical Vasectomy Reversal procedure conducted by our doctor team takes around 2-3 hours. During this procedure the vasectomy site and that best for suturing is located in response to the results of the preoperative ultrasound scan. The patency of the vas deferens is initially checked with fluid, which should exit through the penis. The fluid in the testicular end is then checked under a high magnification scientific pathology microscope to check for sperm debris and live sperm.

The two ends of the vas deferens are then joined under an operating microscope that has an extremely high magnification and a Xenon light source.

The finest sutures (a third of the size of a human hair) are used with a non-cutting, non-traumatic needle to join the two ends. If the vasectomy was originally conducted in the correct place, this reversal procedure should take about one hour on each side. In cases where the original procedure has been performed low down in the scrotum, an epididymo-vasotomy may have to be performed, which joins much smaller epididymis to the remaining vas deferens. These joins are made with three layers of accurately placed micro-sutures.



OWEN 3-LAYER TECHNIQUE

The unique Owen 3-Layer Closure Technique we use in our vasectomy reversal prcoedures is incredbly successful.

At Metrocentre we are one of the few clinics in the world to use this refined closure technique, which was pioneered and perfected by Professor Owen in 1971 and has been performed ever since in conjunction with Dr Chris Lekich and his team. This highly successful technique has been used in over 6000 microsurgical vasectomy reversal procedures.

This technique is uniquely effecive as it uses three layers of suture to re-join the two ends of the vas tube. The vas tube has three layers:

- · Inner Intima
- · Middle muscular
- · Outer adventital layer.

With a width of just two hairs, the vas tube bore (or lumen) that transports sperm must be aligned delicately and accurately to both allow the sperm to flow once more and minimise the risk of fibrosis scarring. Anastomosis (or rejoining of the affected tubes) on both sides of the scrotum are always attempted.

THE BENEFITS OF THE OWEN 3-LAYER CLOSURE TECHNIQUE

This advanced technique presents a range of benefits over other traditional reversal procedures:

- · A stronger anastomosis (join) of the vas tube can be achieved. This enables the successful passage of sperm and due to the supporting sutures, this does not create any tension on the site of the join
- The 3-layer alignment maintains the passage of sperm and minimises unwanted scarring to optimise the success of the procedure.

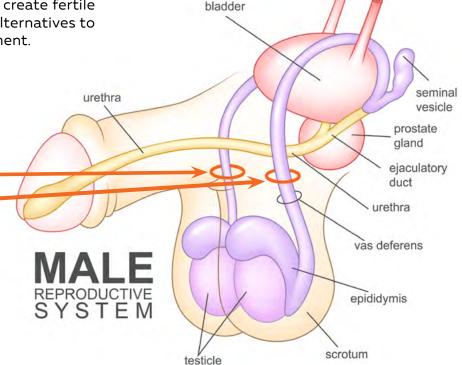
HOW DOES IT WORK?

Seminal fluid is added to sperm to yield a normal ejaculation, which is produced by two separate glands located in the pelvis, the seminal vesicles and the prostate gland. Seminal fluid makes up about 95% of the ejaculation, so men who have undergone a vasectomy may not notice any difference in the volume of fluid.

A man still ejaculates after a vasectomy procedure; however, this semen will not contain any sperm. The testicles will continue to produce sperm after a vasectomy, but if both vas deferens have been tied off, the stream of sperm is simply blocked in the vas deferens tube. Metrocentre's vasectomy reversal procedure reconnects the vas tube to allow the sperm to mix with the semen once more to create fertile seminal fluid. There aren't many alternatives to this procedure besides IVF treatment.

The Owen 3-Layer Closure Technique is outlined in depth at every consultation using video of the surgery to demonstrate the detail. There are small snippets to be seen on the website so that patients can gain perspectives about microsurgery before their visit. We encourage patients to review vasectomy reversal surgery online to assist in the comparison of surgical technique as studies have shown that the success of vasectomy reversal is dependent on the surgeon's skill, technique and volume of vasectomy reversal procedures performed.

The vas deferens are reconnected to allow sperm to mix with semen again





SUCCESS RATES OF VASECTOMY REVERSALS

When selecting a clinic to perform the vasectomy reversal procedure, it is important you examine the success rates and not the pregnancies that each clinic experiences. Our highly experienced team has successfully reversed vasectomies performed anywhere from 1 to 34 years ago.

Following over 40 years of pioneered and perfected microsurgery by Professor Earl Owen, the published success rates of the Owen 3-Layer Vasectomy Reversals are as follows:

Years since vasectomy	Success rate
0 - 5 years	80 - 90%
6 - 10 years	70 - 80%
11 - 15 years	65 - 75%
16 - 20 years	50 - 65%



It is this technique that Professor Owen trained Dr Lekich at the microscope for almost 4 years and retired his practice to Dr Lekich after this comprehensive training program. He continued to work with Dr Lekich for 10 years.



Vasectomy Reversal Baby

Photo supplied by proud parents after a vasectomy reversal with Metrocentre.

Several factors can influence the success of this reversal procedure, these include:

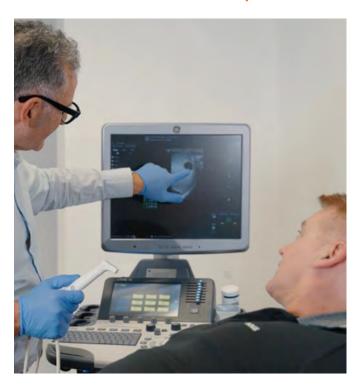
- · The time between the original vasectomy and the reversal procedure
- · The technique employed for the original vasectomy
- · The precision, experience, skill and equipment your chosen team employs.

THE IMPORTANCE OF ULTRASOUNDS IN VASECTOMY REVERSALS

Ultrasound allows visualisation of the structures in detail. Our doctors use a dedicated ultrasound of the scrotum to map, assess, and plan the procedure. High resolution scanning enables them to see fine details of the micro-tubules deep within the body of the testicle, epididymis, and scrotum, which are not visible to the naked eye or with the microscope. This is particularly useful for past IVF extractions, and past failed vasectomy reversal attempts. The ultrasound has allowed our doctors to advise patients regarding the likelihood of surgical success, in particular, patients who have had previous procedures and previously failed scrotal vasectomy reversals.

For example: one patient had his vasectomy 23 years ago, had two failed reversal attempts elsewhere and then had three sperm extractions through IVF. Several clinics had told him that a reversal was now impossible. After careful ultrasound assessment and planning, we successfully reversed this patient – achieving a 35 million sperm per ml count nine months after our procedure, with a wound that was 1cm in length on both sides.

For this reason, we invite patients who have been told nothing can be done to reverse their vasectomy or have had a failed vasectomy reversal/s to consider a second opinion.



The use of ultrasound has enabled the delivery of safe and minimally invasive Owen 3-Layer Microsurgical Vasectomy Reversals, difficult vasectomy cases, and the management of post vasectomy congestion syndrome. Coupled with our doctors micro-surgical training, the ultrasound has helped our highly skilled team assess and plan for surgery. This is particularly important when our team is challenged with:

- · Failed vasectomy reversal/s
- · Multiple IVF sperm aspirations
- · Past scrotal trauma
- Past scrotal surgery (torsion, undescended testis, varicocele and hydrocoele)
- Where patients have been told that a vasectomy reversal is not possible due to the original vasectomy
- · A combination of all of the above.

There has been open criticism with regards to the use of ultrasound by competing surgeons, with suggestions that this is a waste of time. We respect these opinions as all surgeons try their best – open exploration has been commonplace during vasectomy reversal procedures for many years. With the benefit of ultrasound, we have almost completely eliminated the need to explore the scrotum during the procedure, which preserves the precious vas deferens. This subsequently reduces the risk of bleeding. To date we have never had a patient experience a scrotal hematoma after surgery. We do not routinely use drains which are often used in other practices.



YOUR QUESTIONS ANSWERED

1. Are vasectomy reversal procedures successful?

Yes – at Metrocentre, our advanced Owen 3-Layer Technique results in a very high success rate.

It is this technique that Professor Owen trained Dr Lekich at the microscope for 4 years. He continued to work with Dr Lekich for 10 years and now Dr Lekich has dedicated his time to supporting the doctor team at Metrocentre.

When searching for a clinic to conduct your vasectomy reversal procedure, it is important to not only ask for success rates but also actual birth rates.

2. What kind of anaesthetic is used?

During this procedure we use heavy twilight sedation to take advantage of the benefits of general anaesthetic without the associated risks.

This means that our patients can experience rapid recovery and discharge from our facility and avoid the risk of vomiting. Twilight sedation is especially advantageous for our fly-in/fly-out patients as they can return to their accommodation with their partners after this procedure. It is important to inform us of your medical history and any drug allergies you have experienced before undertaking this procedure.

3. What does recovery entail after the procedure?

Most patients experience virtually zero postoperative pain associated with this procedure.

If you do experience some mild discomfort in the first few days after this procedure, paracetamol can be used to offer relief. A comprehensive summary of the postoperative instructions will be provided well before your procedure.

There are several steps that are used to assist the anastomosis (joining) of the vas tubes.

At Metrocentre we recommend the following for the first four weeks after surgery:

- · Avoid sexual intercourse
- Avoid participating in any type of 'jiggly' activity such as running, jumping, swimming, surfing and horse riding (walking is fine)
- Work may be resumed reasonably soon after the procedure. That said. Some occupations involving heavy activity may require a longer period of time off
- Patients are required to attend a postoperative review the day after so if you are travelling from interstate, it is important to discuss your travel plans with our team when booking your procedure.



MEET OUR DOCTOR TEAM

Dr Chris Lekich

M.B., B.S. (QLD), JD (Bond University), MBA, FACP

Dr Chris Lekich is the medical director of Metrocentre. He is a Queensland medical graduate with 15-year microsurgical a backgroundworkinginthefieldofophthalmology and retinal microsurgery, hence his love of microscopes. He was originally pursuing a career as an eye specialist, working in a retinal clinic whilst studying for his basic ophthalmic exams, and then changed his pursuits from eye surgery to the treatment of varicose veins using endovenous laser and ultrasound-guided sclerotherapy (hence his love of ultrasound) and becoming a fellow of the Australasian College of Phlebology. This came about due to the serious blood clot his then-wife developed in varicose veins during pregnancy. It was his wife's necessity to get off the oral contraceptive pill due to her venous disorder that led him to a decision for a vasectomy and after much personal research Professor Owen's team to perform this as an Open-Ended Vasectomy.



Dr Rhys Bennett

BMed, MD (QLD), FRACGP, GradDip MedUltrasound (Qld), BMRS (MI)

Dr Rhys Bennett has a distinguished medical career spanning multiple disciplines, including general practice, radiology, and sonography. His deep understanding of anatomy and precision in procedural techniques, honed during his years as a Senior Radiographer and Sonographer at Gold Coast University Hospital and Robina Hospital, make him uniquely skilled.

Dr. Lekich has provided extensive training under the Metrocentre formal training program to Dr Bennett, which incorporates 50 years of pioneering expertise, handed down from our mentors Professor Earl Owen, Dr Bruce Errey, and Dr Barry Walters. Dr. Bennett is a valued member of the Metrocentre Team and highly skilled at vasectomies and microsurgical vasectomy reversals.







Head Office: Miami Gold Coast

For other locations, please refer to our website.



www.metrocentre.com.au