

Ashfields Provider Services

VASECTOMY - A PATIENT'S GUIDE v.18.3

Vasectomy - A Patient's Guide v.18.3

Ashfields Primary Care Centre
Middlewich Road
Sandbach
CW11 1EQ

Main Number: 01270 446560
Vasectomy appt Number:
01270 446568

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Checklist for Your Vasectomy

The day before your vasectomy:

- Shave your scrotum to reduce the risk of post-operative infection.
- Ensure that you have paracetamol & ibuprofen available, or an alternative if you can't take them.
- Re-read this guide and make a note of any questions that you may have to ensure that you don't forget to ask them when you attend Ashfields.

The morning of your surgery:

- Have a sensible breakfast to avoid feeling faint during or immediately after surgery.
- Wear supportive underwear when you attend Ashfields.
- Arrange for someone to drive you home after the procedure. If driving yourself home is unavoidable, you will be asked to stay at the surgery for 30 minutes after the procedure.

After your surgery

- Remember that some wound bleeding, bruising and discomfort is expected; take simple analgesia (paracetamol and/or ibuprofen) and wear supportive underwear or an athletic support/jockstrap for as long as you need to.
- Mark your diary or calendar with reminders to submit a semen specimen after 3 months.
- Submit your semen specimen at 3 months, following the instructions on production & delivery.
- Continue to use alternative contraceptive precautions until you have received notification from us IN WRITING that it is safe to cease.
- PLEASE return the questionnaire that you receive with your final letter of confirmation of sterility; we rely upon your feedback to improve the service we provide.

Confirmation of Sterility

You will usually be contacted within 3 weeks of submitting your 3 month semen sample BY LETTER. You will only be informed that you can reasonably regard yourself as sterile and dispense with alternative contraceptive measures if your semen sample contains NO sperm. This may take many months and **can take over a year**.

If you need to submit a further sample we recommend waiting until 5 months after your vasectomy, by which time 93% of men will have no sperm in their semen. Some men need to submit a third sample at 7 months. If this contains any sperm, a different type of specimen is required for 'special clearance' (see below).

Once you have achieved a semen specimen devoid of all sperm we will write to inform you and will send a copy of the letter to your GP. Only then will we advise you that it is safe to abandon alternative contraceptive precautions.

Rarely, small numbers of dead sperm persist in the semen for many months after a vasectomy. Where there are less than 100,000* such 'non-motile' sperm per ml of fresh semen on microscopy the published evidence suggests that the chances of a pregnancy resulting if contraceptive precautions are not used is no greater than the chance of spontaneous recanalisation (see 'failure' above) and is estimated to be 1 in 2000. Since men have to accept this risk before undergoing a vasectomy it is reasonable to offer them '**Special Clearance**' in this situation. However, to be sure that non-motile sperm are indeed 'dead' at the time of ejaculation rather than dying in transit or while awaiting examination special clearance can only be offered following examination of two 'hot' semen specimens that have been produced on-site in the Patrick Murphy Unit at Leighton Hospital and examined immediately. If you become eligible for special clearance you will be contacted with an appointment for 'on-site semen production and hot microscopy'. We will write to you with the result of the first hot specimen and arrange the second or alternative arrangements as appropriate.

*The figure of 100,000 non-motile sperm per ml of fresh semen is taken from 'British Andrology Society guidelines for the assessment of post vasectomy semen samples (2002), Hancock P & McLaughlin E, *J Clin Pathol* 2002 **55**: 812-816' and '2016 Laboratory guidelines for postvasectomy semen analysis: Association of Biomedical Andrologists, the British Andrology Society and the British Association of Urological Surgeons, Hancock P, et al. *J Clin Pathol* 2016;0:1-6. doi:10.1136/jclinpath-2016-203731.' These documents are the scientific basis of the Ashfields Provider Services Vasectomy Service.

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Introduction

Your General Practitioner has asked us to consider performing a vasectomy for you.

Please make sure you read the enclosed information about the procedure ('Vasectomy – A Patient's Guide' and 'Vasectomy Post Operative Instructions'). This information is designed to provide you with the answers to any questions you may have about the procedure and what happens next.

If you are happy that you understand what is involved, have carefully considered the alternatives with your spouse/partner and your General Practitioner, and you do not have any additional questions, please contact Ashfields Provider Services (APS) to make an appointment. Please contact the 'Ashfields Provider Service' (APS) appointment line on

How to make an appointment

Please telephone 01270 446568

Weekdays 10:00—16:00 (excluding Tuesdays)

When you ring, we will offer you an appointment for the vasectomy. We will usually offer you the next available appointment; however, if that date is not convenient for you, we can offer later dates.

You will be asked to attend the Reception Desk **15 minutes before your appointment time**, on the agreed day at:

**Ashfields Provider Service
Ashfields Primary Care Centre
Middlewich Road
Sandbach
CW11 1EQ**

IF YOU DO NOT RING WITHIN ONE MONTH FROM THE DATE OF YOUR GP APPOINTMENT IT WILL BE ASSUMED THAT YOU DO NOT WISH TO UNDERGO A VASECTOMY AND NO FURTHER ACTION WILL BE TAKEN.

Confirming Sterility & Semen Samples

Achieving Sterility

Because mature sperm may be stored in the seminal vesicle and be present in the system above the point of division of the vas deferens, it is essential that you take contraceptive precautions until you have been formally informed that you have been proven to be effectively sterilised.

The "accepted standard" for sterility following a vasectomy in the UK is the total absence of all sperm from a correctly collected and analysed semen sample. This will be the case after 12 weeks and 20 ejaculations in 80% of cases. **You must continue to use alternative contraceptive techniques until you have been formally informed by letter from Ashfields Provider Service that you have been rendered sterile.** The more often that you ejaculate in the meantime the more likely it is that your sperm stores will have been emptied by the time you submit your samples.

Collecting Semen Samples

You will receive an appointment in the post, together with a sample pot and form, approximately 12 weeks after your vasectomy. The letter will tell you what to do.

Aftercare

Minor complications: Some wound edge bleeding, bruising and wound pain is very common following vasectomy and you should not be alarmed by this.

Underwear: Wear supportive underwear (briefs, swimming trunks or a jock-strap/athletic support) NOT boxer shorts for 5-7 days. You may wish to place a dry dressing pad, panty liner or some toilet tissue in your underpants to protect them from staining and absorb the small amounts of blood & discharge that are normal following surgery.

Showering & Bathing: You can shower immediately (briefly) but bathing & swimming is best deferred for 24 hours.

Pain Relief: The local anaesthetic will wear off after 4-8 hours. Ideally you should start simple "over-the-counter" pain killers as soon as you get home before you experience any breakthrough wound discomfort. Provided that you are not known to be allergic and have no conflicting condition or medication we recommend paracetamol (1g every 6 hours) or ibuprofen (400mg every 8 hours) or better still alternating these (paracetamol 1g, then ibuprofen 400mg 4 hours later, then paracetamol 4 hours later etc) should be sufficient to keep you comfortable.

Work & Exercise: Office workers should be fine to return to work the same day. However, it is sensible to abstain from heavy work or exercise for 36 hours to reduce the chances of developing a haematoma.

Wound & Stitches: No stitches will be needed to the small wound on the scrotum. YOU WILL BE INFORMED IF A STITCH IS USED

Emergency Care: In the unlikely event of a problem on the day of your procedure you should ring Ashfields Primary Care Centre. However, after 18.30hrs on the day of your procedure you should seek further advice through the NEW service, NHS Direct or your local Accident & Emergency Department. Following this, please contact your own GP surgery.

Contraception: You **MUST** continue to use alternative contraceptive precautions until informed by Ashfields Provider Services that your vasectomy has been successful and rendered you sterile – see below.

What is a Vasectomy?

A vasectomy is a minor operation designed to render a man sterile and unable to father children. A tube (the vas deferens) is divided to prevent the transport of sperm from the testes to the ejaculate. It should be regarded as a permanent form of contraception and only pursued if you are absolutely certain that you do not currently wish to father children and can envisage no reasonable circumstances in which you might change your mind. If you are thinking about storing semen against a change in circumstances do NOT have a vasectomy; storage facilities can malfunction.

You should not consider vasectomy in isolation but should discuss the alternative CONTRACEPTION for both men and women with your General Practitioner and Spouse/Partner. Unlike barrier methods of contraception, vasectomy offers no protection whatsoever from sexually transmitted diseases and AIDS.

Relevant Biology of Sperm Production and Transport

Sperm are produced by the testes. They mature in the epididymi (the tubular structures next to the testes) and travel up towards the seminal vesicles in the vas deferens prior to ejaculation. Various nutrients are added by the seminal vesicles, which may act as storage chambers for mature sperm. During ejaculation semen is ejected out through the tip of the penis by rhythmic contractions of the seminal vesicles and ejaculatory ducts. On the way out, additional fluid and nutrients are added by the prostate gland.

The Aim of Vasectomy

By dividing your vas deferens on both sides, sperm will not be able to pass up to the seminal vesicles. Once the reserves of sperm have been used up (usually after 20 ejaculations) your semen should no longer contain the sperm that are responsible for fertilising the female egg following sexual intercourse. However, because most of the fluid volume of semen comes from the seminal vesicles and prostate, you will still ejaculate semen in the normal way and your orgasm should be unaffected.

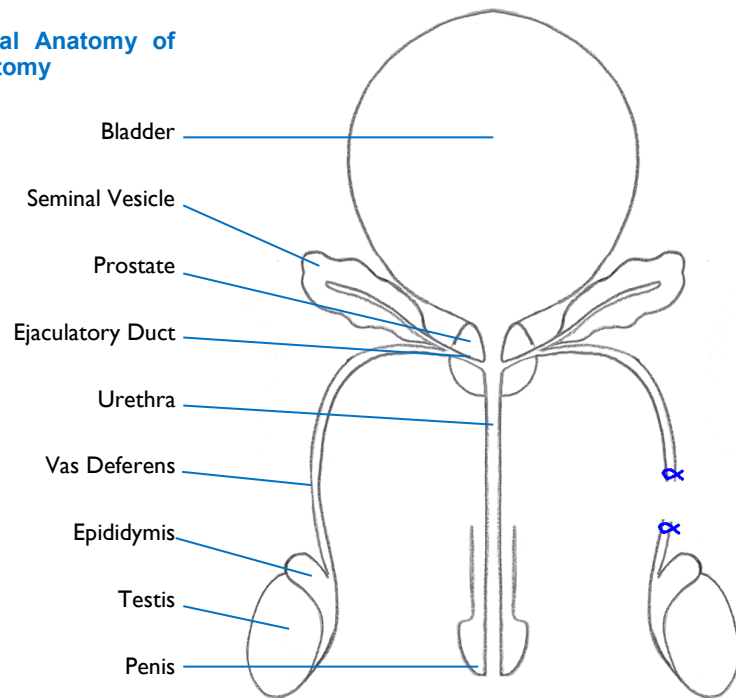
The Surgical Procedure

All vasectomies at Ashfields are performed under local anaesthetic (LA) when you are awake and can talk to the surgeon and nurses. You will be able to feel gentle tugging but should not feel sharp pain. If you would prefer to be asleep under a general anaesthetic (GA) you will need to be referred to a local hospital and will not be able to make use of the General Practice Vasectomy Service.

The operation takes 15-30 minutes and is performed through a single incision in the front of your scrotum or two small incisions, one on each side. This depends partly on an individual surgeon's preferred technique and partly on how the vas deferens lie in the scrotum at the time of surgery.

Once each vas has been found a segment is cut out and the ends are tied. Different surgeons have different ways of doing this which balance the desire to achieve reliable long-term sterility with the knowledge that occasionally circumstances may change and men may request vasectomy reversal at a later date (see below). The scrotum is closed with an absorbable stitch that does not require removal.

Surgical Anatomy of Vasectomy



need a hospital review.

If a haematoma becomes infected, a scrotal abscess (collection of pus within the scrotum) may ensue. This requires admission to hospital and a further operation to evacuate the pus, often inserting a temporary drain through the skin.

To reduce the chances of an infected wound you are asked to shave your scrotum the day before your operation to prevent hairs from becoming caught in the wound and transferring bacteria.

Lumpy Testicles

The testes continue to produce sperm following a vasectomy and with time the tubes of the epididymis and the first part of the vas deferens before the point of division may become swollen with 'frustrated' sperm. Sometimes small amounts of sperm may escape into the surrounding tissues and set up an inflammatory reaction to produce a 'sperm granuloma', typically adjacent to one of the cut ends; these may become painful (see above). Such lumps may concern men who regularly examine their testicles since they may misinterpret them as testicular cancer. Should you be worried about a lump that you find in your scrotum following a vasectomy it is important that you see your General Practitioner to ensure that it is nothing sinister. However, remember that innocent lumps are common after vasectomy so do not get worried that you have got cancer.

Vasectomy Reversal

You should not undergo a vasectomy unless you are convinced that you do not wish to father any (more) children and can conceive of no reasonable circumstances that would make you change your mind. However, no one knows precisely what the future holds and firmly held convictions can change with unforeseen changes in circumstances. This may lead some men to request vasectomy reversal in a bid to be able to father children again.

Vasectomy reversal is technically possible in the majority although the outcome cannot be guaranteed. Generally, the longer the interval between vasectomy and its reversal the less likely it is that even a technically successful procedure (producing 'patent' vas deferens) will result in a fertile man able to father a child with a normally fertile woman by conventional sexual intercourse. Vasectomy reversal after 8 years has a less than 50% pregnancy rate.

Just as a successful vasectomy can 'recanalise', so a successful vasectomy reversal can re-block. Most surgeons will only attempt vasectomy reversal once in any one man; re-operations are less likely to succeed than the first attempt and we would usually recommend referral to an assisted conception unit rather than a second attempt at reconstructive surgery.

You may experience discomfort, a dull ache or pain during the procedure, felt in the stomach area; this is due to the pulling and handling of the vas deferens and is to be expected. It is something local anaesthetic will not stop. Ideally, you should take two paracetamol before the procedure to minimise the risk.

Occasionally testicular pain can be severe. This may be persistent from the time of operation but it can occur at any time, even many years later. It is rarely clear why pain should occur later, although transient pain can occur adjacent to the cut ends due to an inflammatory reaction to sperm; this may settle down with a non-steroidal anti-inflammatory agent (e.g. ibuprofen or diclofenac). Persistent severe pain is rare but can be very debilitating and difficult to treat. Very occasionally it can even lead to men giving up their normal occupation and to depression. However, experience suggests that it responds well to hypnotherapy.

Bleeding & Haematoma Formation

A little bit of wound bleeding and bruising is common after any operation. However, the skin of the scrotum is a lax bag and provides no compression to the underlying structures. Any small vessel that bleeds therefore has little to stop it from continuing to bleed until such time as the scrotum is full. Bleeding is therefore more common after scrotal surgery than surgery on a limb, for example, where the surrounding skin and muscles exert some compression.

A large volume of accumulated blood is known as a haematoma. Unless this is very uncomfortable or shows no sign of stopping it is generally best left alone and managed by rest and a scrotal support. Although it is tempting to re-operate to drain the haematoma this frequently makes it worse, for the blood is usually contained within the tissues of the spermatic cord or scrotal walls rather than free within a 'space' and may be impossible to evacuate. Left alone a scrotal bruise will be observed over several weeks or months going through most of the colours of the rainbow.

Testicular atrophy

Testicular shrinkage leading to testicular death and pain is a very rare complication if a major artery were to be cut off. This is permanent.

Infection & Abscess Formation

Although most men are socially clean, the scrotum is a relatively dirty part of the body; it is covered in microscopic bacteria. Scrotal wounds are therefore more prone to infection than wounds elsewhere on the body. Infections may become apparent as pain in the wound, reddening of the skin or yellow pus emerging at the THE WOUND SITE. If you suspect that you have a scrotal infection after a vasectomy you should see your General Practitioner quickly for some antibiotics. He will contact a urological surgeon at a local hospital if he feels that you

What can go Wrong?

Failure

Very occasionally it can prove difficult to adequately feel the vas deferens under LA. This may be apparent before surgery starts or may only become apparent during the procedure. In such circumstances the procedure is abandoned and arrangements will be made for you to attend a local hospital for the procedure to be performed/completed under GA at a later date. Any incision that has been made will be closed so that you can go about your life normally while these arrangements are made.

You may be able to feel your own vas deferens as a thin (3mm) chord running from your testicle up into the neck of your scrotum. This is stabilised between the operator's fingers before completing the surgical incision. Occasionally a blood vessel or a strand of tissue can feel very similar and can be mistaken for the vas deferens. Dividing such tissue will not prevent sperm from reaching the ejaculate and the procedure will therefore fail. However, with experienced surgeons this is very rare indeed.

There is generally a single vas deferens on each side of the scrotum, one coming from each testicle. However, very occasionally there may be more than one vas deferens on one or both sides and the second tube can sometimes be missed by the operator, leaving an alternative pathway for the free passage of sperm and preventing sterility.

Rarely (estimated at 1/2000 cases) following a successful vasectomy the vas deferens that have been divided may spontaneously re-join and allow the passage of sperm into the ejaculate once more. There is no way of predicting when this 'recanalisation' may occur or in whom. It may occur at any time after a vasectomy, early or very many years after the procedure. If you are not prepared to accept this risk it stands to reason that you should not proceed with a vasectomy.

Pain

Vasectomy is not usually a particularly painful procedure although some wound discomfort is common. Most men manage perfectly well with simple pain-killers (e.g. paracetamol and/or ibuprofen) available over the counter at a local chemist. However, some find that they have testicular pain for a few days or even weeks. This can be reduced by supporting the scrotum well following the procedure using an athletic/scrotal support (Jock strap), tight swimming trunks or closely fitting underpants, avoiding boxer shorts.