A *vasectomy* is an operation to cut and seal off the tubes (called the vas deferens) that carry sperm from each of the testicles to the penis. A *vasectomy reversal* is an operation to bypass the sealed tubes. This means that the sperm can proceed down the tubes from the testicles to the penis.

- **Why have a vasectomy reversal?**

Patients requiring reversal of vasectomy can range from 24 - 54 however, they can be of any age. They vary on the reasons for having a vasectomy reversal into three categories:-

- 88% of men have formed new relationships and wish to consolidate this with a child.
- 10% of men just decide to change their mind and want more children
- 2% are dissatisfied with their vasectomy or have post vasectomy pain syndrome and wish to return to ‘normal’.

Reversals up to ten years after vasectomy carry a high success rate but after this time there is a steady decline although we have known success even after 20 years.

- **What are the alternatives?**

Assisted conception techniques such as ICSI (Intracytoplasmic sperm injection) are possible alternatives. This process is generally less successful than reversal and involves both partners in the medical intervention; it is also more costly. It has a role in specific circumstances.

- **Deciding to have a vasectomy reversal**

Hundreds of men have a vasectomy reversal each year and it is generally a very safe procedure. The BUA on average perform 3-4 per week via micro surgery. Micro surgery requires specialist training and constant practise to acquire the necessary skills and maintain them. The BUA consultants perform reversal vasectomies at least twice a week and were trained extensively in the UK and USA.

- **The BUA Clinical Process**

**Pre op consultation:** In order to give informed consent, anyone deciding whether to have a vasectomy reversal needs to be aware of the possible side-effects and the risk of complications. Patients are encouraged to ask any questions they or their partner may
have, no matter how trivial they think they may be. The surgeon also needs to access the patient's suitability (usually 90% of patients are suitable), this is a physical examination.

Appointment is given for the procedure.

The Disrupted vas deferens are rejoined

- How is it done?

Vasectomy reversal is routinely performed under general anaesthetic, with an overnight stay in hospital. (A general anaesthetic may be given, but this is uncommon). The operation lasts about 2 hours.

Before coming into hospital, men are asked to:

- Have a bath or shower at home on the day of admission
- Bring tight-fitting underpants to wear after surgery - these support the testicles and reduce swelling

Before the operation, part of the scrotum may need to be shaved to prevent hairs getting caught in the wound. Some men prefer to do this at home themselves before coming into hospital.

A pre med may be prescribed as this provides relaxation and post op pain relief.

The surgeon will feel the testicles to find the vas deferens and the site where the original vasectomy blocked the tube. The surgeon then sections off the tube above and below this area to locate fresh open vas. At this stage we check that the reproductive tract is still functioning by flushing the upper vas with saline and sampling fluid from the testicular vas under the microscope.

The surgeon then joins the ends of the vas together using fine stitches. The inner tube of the vas that carries the sperms is micro surgically stitched together followed by the muscle of the wall of the vas. Then the over lying tissue is closed over the top of the repair for strength and to ensure blood supply. A scrotal pressure dressing is then applied.

The operation will leave the patient with a midline 3cm scar in the scrotum. The wound is usually closed with dissolving stitches.
• **What happens afterwards?**

After the procedure, a nurse will assess the operation site and provide advice about caring for the wounds and on taking a bath or shower. Most people feel ready to go home after a short rest and some light refreshment, but it is sensible to arrange for someone to do the driving.

A painkiller such as Paracetamol or Ibuprofen should help relieve any discomfort. Always follow the instructions on the packet.

It is best to take at least a week off work. It is advisable to avoid heavy lifting or vigorous exercise in the first few days after the operation, as this can put a strain on the healing wounds.

It is fine to have a bath or shower as normal, but the area should be dried gently and thoroughly. Any dissolvable stitches will disappear on their own after about a week, and adhesive strips can be peeled off after 7-10 days.

The wounds should heal fairly quickly. However, if there is an increase in swelling, or if either of the wounds becomes red or hot, the hospital should be contacted immediately, as this indicates that there may be an infection.

**Sex:** You can resume sexual intercourse as and when you feel able.

**What are the % of being fertile again?**

This depends on many factors but mainly the length of time since the original vasectomy was performed. This is because the likelihood of the tubes being blocked increases with each year that goes by. However the operation is successful in more than 80% of men who have the reversal within 10 years after the vasectomy. Even if the vasectomy was done more than 10 years ago there is still a worthwhile chance of success.

**Complications:** Complications are unexpected problems that can occur during or after the operation. Most men are not affected, but the main possible complications of any surgery are excessive bleeding during or very soon after the operation, or infection. Complications may require further treatment such as returning to theatre to stop bleeding, or antibiotics to treat an infection.

Specific complications of reversal of vasectomy are rare, but can include the following problems:

- Bleeding can occur inside the scrotum, causing it to swell and become painful. This is called a haematoma.
- It is possible for sperm to leak out of the tubes and collect in the surrounding tissues. If this happens, hard lumps, called sperm granulomas can form. This is rare but can be painful, and some men opt to have these lumps removed.
- Very occasionally, the cut tubes become inflamed and cause other tubes next to the testicles to swell. If this happens, it can cause a dull ache in the testicles that can last for several months.
- A small proportion of men experience pain for longer. This may be due to pinched nerves or scarring and might require further surgery.

The chance of problems depends on the exact type of operation and other factors such as the man's general health. The surgeon will be able to explain how the risks apply in each individual case.

• **Further Information**
