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## <u>Vasectomy</u>

Vasectomy is a highly effective, permanent form of contraception for males.

In general terms, only those who already have children and cannot imagine circumstances where they would want more, should consider vasectomy.

Vasectomy is a surgical procedure that can be performed under local anaesthesia. It involves stopping the passage of sperm from the testicle to the outside. The tube that carries sperm from the testicle to the prostate gland is known as the Vas Deferens, hence the name of the procedure. If this is blocked, the male will continue to ejaculate prostatic secretions but no sperm. The bulk of normal ejaculate is made up of these secretions, so that the experience of ejaculation after vasectomy remains unaltered. Only by looking under a microscope could you tell that sperm are absent from an ejaculation. The volume and appearance is unchanged.

## **Outcomes**

Vasectomy is a highly effective operation with a low failure rate. The stated failure rate (i.e. pregnancy) in worldwide literature is between 1:400 -1:2000 (.025% - .05%). The operation does not affect sex drive or sexual performance and is now one of the most popular forms of contraception for over 30 year olds in NZ.

#### Risks

Vasectomy has been looked at closely in relation to major disease such as heart disease and stroke and there is no alteration in risk for these diseases.

As you would expect, it has been looked at especially closely in relation to cancer of the testicle and cancer of the prostate. The combined evidence to date of trials in many countries that now involve tens of thousands of men, is that there is no increased risk of either of these cancers in men who have had vasectomies. The Cochrane Data Base (an ongoing multinational collaboration that looks at many problematic medical issues) contains the conclusion that on present evidence vasectomy is not seen as a risk for these diseases.

As a surgical procedure, the usual risks do apply. There is a risk of bleeding / bruising and infection. Occasionally, variations of anatomy can make successful completion difficult. Refer to the following passage on the procedure as to how we minimise these risks and your role in that.

There is said to be a 2% incidence of formation of a sperm granuloma. This is a small tender nodule that can form at the cut end of the vas. Occasionally this can be troublesome enough to warrant later surgical removal.

#### Reversal

Reversal of a vasectomy is technically possible i.e. the divided ends of the vas are re-joined, however pregnancy rates are only in the order of 50% - 60%. This is because the body has been breaking down sperm by attaching anti-bodies to them and these anti-bodies continue to weaken the sperm even after reversal.

# Procedure - how we do it here

The procedure is done under local anaesthetic using the Li or 'no scalpel' technique. Generally a small dose of intravenous Valium (Diazepam) is used as a muscle relaxant and also acts as an overall relaxant.

The vasa (plural of vas - one for each testicle), can be felt like limp spaghetti in the scrotum. Initially one vas is wriggled over to the centre line and gently held under the skin. This allows local anaesthetic to be injected into the skin and around the vas. As you can imagine this is the uncomfortable part of the procedure, but no worse than any other local anaesthesia. After waiting a few minutes for the anaesthetic to work, the skin is punctured over the vas using a special instrument that allows access to the vas. The vas can then be lifted up and a segment (approx. 1 cm long) is removed. The end closest to the testicle is tied off and bent back on itself. The other end is closed using a diathermy (an electrical device that seals tissue) and a layer of tissue is sutured between the two ends. These complicated manoeuvres are designed to minimise the chance of the vas re-joining.

This vas is then dropped back in to the scrotum and the other vas is brought to the same point and the procedure is repeated. The single entry point generally does not need stitching and heals naturally very well.

## Following the procedure

There are two main components to minimising bruising and post operation discomfort. First is to minimise any bleeding at the time which is mainly dependant on the operator taking care to stop any small bleeding vessels (a diathermy instrument is used for this purpose). Secondly, it is important that the patient goes home and rests and takes things quietly for the next 24 hours. An ice pack on the scrotum following the procedure can also help. You should anticipate some bruising of the scrotum, although this doesn't always happen. You will be uncomfortable for the next week and may need to take paracetamol from time to time. The level of discomfort is generally low enough to permit you to work and carry out normal activities, but a degree of common sense is needed.

### Sperm count

The final component to vasectomy is to have a sperm count to verify that no sperm are being ejaculated. Sperm need to be flushed out of the system, so there is no point in doing this until after 15 - 20 ejaculations. You will be given forms and jars for this purpose. You **must** continue to use contraception until you have been advised of a clear result.

## Sequence of events and Costs

You will need to make an appointment for an initial assessment and discussion with Dr Loveridge. This is necessary even if you have discussed vasectomy with your own GP. Partners are welcome. This is charged as a normal consultation.

The operation takes approximately one hour from walk in to walk out and we prefer to do these late in the day. Friday afternoon is often a good option, allowing the weekend for recovery. You will need someone to collect you and drive you home.

Cost of the procedure is \$460.00 which includes the cost of your initial assessment appointment. (Prices may alter so please confirm with our staff)