VAECTION REVERSAL INFORMATION

With the use of microsurgical techniques it is possible to reverse vasectomy enabling men to father further children. It is preferred to reverse the vasectomy on both sides. Prior to surgery a blood test can confirm normal hormone levels and physical examination may indicate if there will be a problem to rejoin the cut ends of the vas deferens (vaso-vasostomy). However, until surgery is undertaken the extent of scarring that has occurred following the procedure is unknown. For some men it is not possible to rejoin the vas but instead a more involved procedure (vaso-epididymostomy) is required to join the vas directly to the small tubules of the epididymis. (see below)

Following reversal sperm counts may be lower than that prior to vasectomy but pregnancy can still be achieved. If sperm have not appeared by six months after vaso-vasostomy or 12 months after vasoepididymostomy the reversal has failed. Pregnancy may take up to one year following the operation, similar to the chance of pregnancy for those couples without a history of vasectomy.

DETAILS ABOUT THE OPERATION

A general anaesthetic is required for vasectomy reversal. A pre-medication may be given to produce relaxation prior to entering the operating theatre. Two small cuts are made in each side of the scrotum to allow access to the testis and vas. Intravenous antibiotics are usually given during the operation and local anaesthetic (painkiller) injected at the completion of the procedure to minimise discomfort in the wound for a few hours postoperatively. With the aid of an operating microscope the area of the vasectomy is dissected and scarring blocking the vas removed. A double layer repair of fine suture material is required to join the cut ends of the vas (see diagram 1). At the time of repair may be frozen for future treatment options should the vasectomy reversal not result in pregnancy. (If required please discuss this as extra time and costs are involved.) In vaso-epididymostomy, a similar repair procedure is performed except that the epididymis is smaller and more fragile (see diagram 2).

COSTS

The initial first consultation fee is $250. The surgical fee for vasectomy reversal is $3,500. Anaesthetist fees and operating theatre fees and hospital charges vary according to duration of the operation. Generally this is in the range of $5,6000. Therefore, the total cost is about $9,500. This is an estimate, more details can be provide by contacting the hospital prior to admission particularly regarding overnight admission should it be preferred.

FACTORS PREDICTING SUCCESSFUL REVERSAL

The most important issue is the time since the initial vasectomy. For those men less than three years since the procedure the chance of reversal resulting in satisfactory sperm counts is approximately 90%. At five years this reduces to 70% and if more than ten years has elapsed only 50% of men will have a satisfactory semen analysis. The pregnancy rate after reversal is approximately two thirds (66%) of these men with satisfactory sperm count. Other important factors include:

- type of vasectomy procedure
- complications at the time of vasectomy
- previous history of infertility
- conditions such as diabetes or chronic illness
Consideration of female factors likely to compromise fertility should also be discussed prior to vasectomy reversal. In particular, the following factors may reduce the chance of pregnancy:

- age more than 35 years
- history of tubal surgery
- history of pelvic infection
- history of previous infertility

**PREPARING FOR SURGERY**

A pre operative appointment to discuss the operation consent and admission instructions is required. This appointment is usually planned a few days prior to surgery but may be weeks earlier if more convenient.

Do not eat or drink after midnight if your operation is in the morning, or not after 7am if it is in the afternoon.

Prior to surgery please shave the hair at the front and sides of the scrotum from the base of the penis down. You do not need to shave the pubic hair.

Take supportive underpants into the hospital with you to wear after the operation.

You cannot drive yourself home the same day as the operation.

Most men find it no more uncomfortable than having a vasectomy and Panadol is usually adequate pain relief however consider taking a week off work.

**COMPLICATIONS**

The risk associated with this surgery is small. Complications such as bleeding at the site of scrotal incisions is usually minor and men are encouraged to rest for the first 24 hours following discharge and report any significant bleeding. Rarely further surgery may be required. Surgery has more risk for smokers or those who are over weight.

**RECOVERY AFTER SURGERY**

Following the operation the man may experience some symptoms which may last for a day or two such as:

- fatigue and muscle pain
- mild nausea related to the anaesthetic
- pain at the site of the incisions. This may extend to the abdomen.
- mild bleeding or discharge from the incision site for a few days is common.

**DISCHARGE FROM HOSPITAL**

Discharge from hospital is usually the same day a few hours after the completion of the surgery. Sexual intercourse should not resume for two weeks. I recommend light physical duties for the first week and if necessary medical leave should be applied for up to three weeks to avoid heavy lifting or straining. Although complete healing is not achieved for six weeks, most men return to full activities by four weeks.

From the time of discharge and up to six weeks firm supportive underwear is recommended and avoidance of contact sports which could result in scrotal trauma.

A semen sample for analysis will be requested 6 to 12 weeks following surgery and may be repeated after several months until pregnancy occurs. Such monitoring will reveal late vasal obstruction. This obstruction is due to scar tissue that forms following reversal and occurs in about 5% of patients. The presence of anti-sperm antibodies may affect the chance of pregnancy even with good sperm numbers following reversal. Recent evidence indicates most men will have anti sperm antibodies following vasectomy and there is no clear understanding whether likelihood of pregnancy is affected. If motile sperm are evident within analysed samples then pregnancy can occur.

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