

Testicular Sperm Extraction (TESE)

Testicular sperm extraction may be an option for some men who are severely oligospermic (very low numbers of motile sperm) or azoospermic (no sperm in the ejaculate). For some of these men, there is a chance that sperm may be able to be retrieved directly from the testes and subsequently used for treatment. A man may have normal production of sperm in the testis but an abnormality in the epididymis, vas deferens or the ejaculatory ducts may be preventing sperm from appearing in the ejaculate. These patients often have sperm retrieved with a TESE. In other cases azoospermia may be due to partial or a complete lack of sperm production in the testis. There may be a small chance that sperm can be retrieved directly from the testicles in these patients.

Who may need a TESE?

- Men who do not have sperm in the ejaculate i.e. azoospermic sperm.
- Men who have a blocked or absent Vas Deferens (e.g. Cystic Fibrosis sufferers)
- Men who have had a vasectomy, or a failed vasectomy reversal.

If sperm is retrieved from a TESE the treatment required will be Intracytoplasmic Sperm Injection (ICSI). This involves the female partner undergoing hormone stimulation to promote multiple eggs to develop on the ovaries. The eggs will be collected and then a single sperm can be directly injected into each egg. This can be done with a fresh TESE on the day of egg collection (if a previous TESE has shown successful sperm retrieval) or using frozen sperm from a TESE carried out previously.

Preparation for your TESE:

- We do require that your testicles are shaved, please do this the night before your procedure.
- Do not have anything to eat or drink from 6 hours prior to the procedure. You can sip on a little bit of **water** up until two hours beforehand.
- Please arrive 30 minutes before your scheduled operation time.
- Please bring firm fitting underwear to wear after the TESE.
- You can not drive, operate machinery or make important decisions for 24 hours following the sedation that you will be given. Please ensure someone is available to drive you home and stay with you on the day of your procedure.
- Post operatively you can experience a bit of swelling and discomfort, so you may require a few days off work. For the two weeks following it is advisable to avoid vigorous exercise and heavy lifting.

What does the procedure involve?

The procedure is carried out under local anaesthetic and often mild sedation. You will have an intravenous drip inserted in your arm to allow your nurse to administer medications, including a mild sedative, pain relief and antibiotics. You will also be given a local anaesthetic to the spermatic cord, above the testicle to numb the area.

The doctor will make a small incision in the scrotum to expose the testis and will then extract a small piece of testicular tissue. The incision site will then be closed with dissolving sutures. The tissue is given to the embryologist who will then examine the sample in the laboratory to

look for sperm. A small sample may also be sent away for histology. If sperm is found the embryologist will process and freeze the sample. A small portion of the sample is then thawed to assess if there are viable sperm following the freeze/thawing process and if the sample will be suitable for treatment.

Postoperative care:

- Simple analgesics like panadol should be taken regularly for 48 hours after the procedure as required.
- You are advised to wear supportive underwear following the procedure for 24 hours.
- The sutures will dissolve over 2-4 weeks, as the wound heals you may experience some itching for 1-2 weeks.
- Occasionally there can be a small amount of blood loss from the operation site; this should stop by applying pressure over the area for a few minutes. Bruising is common.
- Avoid any strenuous activity for the following two weeks.

Complications related to the procedure:

No serious adverse effects have been reported following TESE, suggesting that this is a safe procedure.

If you have any questions or concerns please do not hesitate to phone Fertility PLUS nurses on 09 630 9810 ext 3.

If you have any problems outside of clinic hours you will need to seek medical attention from an out of hours medical clinic.