

Micro-TESE

This leaflet explains more about microsurgical sperm retrieval from the testicle (micro-TESE), including the benefits, risks and any alternatives. It also provides information on what you can expect when you come to hospital. If you have any further questions, please speak to a doctor or nurse caring for you.

What is micro-TESE?

Micro-TESE involves an operation under general anesthetic performed through a small incision in the scrotum, through which both testicles can be seen. Sperm is then harvested (collected) from one or both testicles.

Who needs micro-TESE?

Micro-TESE is recommended for people who have abnormal sperm production (non-obstructive azoospermia). There are many causes of this including previous testicular surgery, previous medical treatment, a genetic problem, and other male factor infertility issues. Your surgeon will have organised tests to investigate this before surgery.

What are the benefits of micro-TESE compared to other procedures to extract sperm?

Sperm is found using micro-TESE in about 1 in 2 (50%) of cases. Many studies have shown that micro-TESE yields the highest sperm retrieval rate and causes the least amount of damage to the testicles.

What should I expect before the procedure?

You will usually be admitted on the day of surgery and then be seen by members of your medical team. Please tell your surgeon (before your surgery) if you have any of the following:

- an artificial heart valve
- a coronary artery stent
- a heart pacemaker or defibrillator
- an artificial joint
- a neuro-surgical shunt
- any other implanted foreign body
- a regular prescription for an antiplatelet or blood thinning agent including the following: aspirin, clopidogrel, prasugrel, warfarin, apixaban, dabigatran, edoxaban, rivaroxaban
- a previous or current MRSA infection
- a high risk of variant-CJD (if you had a corneal transplant, a neurosurgical dural transplant or injections of human-derived growth hormone)

Consent – asking for your consent

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves. If you would like more information about our consent process, please speak to a member of staff caring for you.

What are the risks?

Risks of this surgery include testicular and scrotal discomfort and pain, bleeding and infection. There have been reports of temporary low testosterone levels after the procedure. This usually recovers spontaneously without any symptoms. There have been very rare reports of severe testicular damage. If sperm is not found, then a testicular biopsy (which is taken with the sperm retrieval) can help determine if a repeat procedure is suitable. In many cases a repeat procedure is unlikely.

What happens during the procedure?

The surgeon examines each testicle under a high-power operating microscope. The surgeon looks for seminiferous tubules (where sperm is produced and transported) and searches for swollen tubules which are more likely to contain sperm. The surgeon will continue looking until they find sperm, or until they have examined and biopsied the testicle without seeing any sperm. The testis is closed with very fine dissolvable sutures (stitches), and the process is repeated on the other testicle. The sample tissue is then passed to a specialist who will look for the presence of sperm. If sperm are found during micro-TESE, they are extracted and frozen for future reproductive treatment, such as in-vitro fertilization (IVF) with intracytoplasmic sperm injection (ICSI). The whole operation usually takes up to one hour.

The incision will usually be made in the midline of the scrotum:

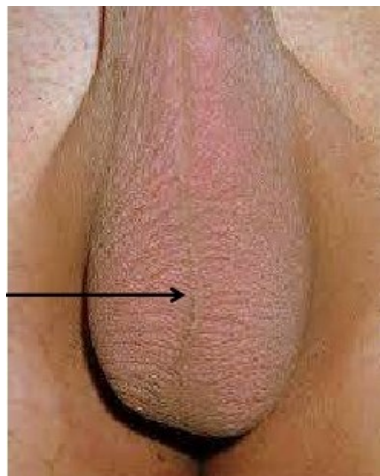


Photo – courtesy of Tet Yap
London Urology Associates.

What happens immediately after the procedure?

Your surgeon will talk to you after the procedure. You can take this opportunity to:

- let the medical staff know if you are in discomfort
- ask what you can and cannot do in terms of physical activity
- discuss any concerns with the staff and ask questions
- make sure that you are clear about what has been done and what happens next.

In most cases you will be contacted by the embryology team within a few days to confirm presence or absence of sperm from the harvest.

The procedure is done as a day-case so you will be able to go home on the same day.

What should I expect when I get home?

Most men are surprised by the minimal amount of pain they have after this surgery. The scrotum is one of the fastest healing parts of the body and the multi-layered closure technique we use helps to make sure that men do not have infections or bleeding after the surgery. There will be sutures on the skin of your scrotum that will eventually dissolve leaving little or no scar. We ask that men avoid sex, masturbation, or vigorous exercise for at least 10 days after the surgery.

Contact us

If you have any questions or concerns about micro-TESE, please contact the clinical nurse specialist, **t:** 07717 346821, Monday to Friday, 9am-5pm. Out of hours, please contact Aston Key Ward, **t:** 020 7188 0709 or Florence Ward, **t:** 020 7188 2441.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit **w:** www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline. **t:** 020 7188 8748, Monday to Friday, 9am-5pm

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk
t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch. **t:** 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day. **t:** 111 **w:** 111.nhs.uk

NHS website

Online information and guidance on all aspects of health and healthcare, to help you take control of your health and wellbeing. **w:** www.nhs.uk

Get involved and have your say: become a member of the Trust

Members of Guy's and St Thomas' NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, please get in touch.

t: 0800 731 0319 **e:** members@gstt.nhs.uk **w:** www.guysandstthomas.nhs.uk/membership

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