DR. CHIRAG GUPTA | UROLOGY & ANDROLOGY

Sperm Retrieval

A patient guide to TESE, PESA, TESA and microTESE

A practical guide to help you prepare for a conversation with your urologist. Your own care plan may differ.

What sperm retrieval means

Sperm retrieval collects sperm from the epididymis or testicle when sperm are absent from the ejaculate or ejaculation is not possible. The cause, examination and fertility plan guide the method. Retrieved sperm may be used with assisted reproduction, often IVF with ICSI, or frozen for later use when suitable.

Common procedures

- **TESE - Testicular Sperm Extraction:** A small testicular tissue sample is taken through an incision and examined in the laboratory for sperm.
- **PESA - Percutaneous Epididymal Sperm Aspiration:** A fine needle is passed through the scrotal skin to collect fluid from the epididymis. It may suit some cases where a blockage prevents sperm reaching the ejaculate.
- **TESA - Testicular Sperm Aspiration:** A fine needle aspirates tissue and fluid from the testicle for laboratory examination.
- **microTESE - Microsurgical Testicular Sperm Extraction:** An operating microscope helps the surgeon examine testicular tissue and select areas more likely to contain sperm. It is used for selected non-obstructive azoospermia cases.

Before the procedure

Your team may review semen tests, medical and surgical history, examination findings and hormone or genetic tests when appropriate. Tell the team about medicines, allergies, bleeding problems and prior fertility procedures. Ask whether you need to fast, change medicines, arrange a ride home or coordinate with the fertility laboratory. Follow your own care team’s instructions.

Recovery and possible risks

Recovery depends on the technique and anaesthesia. Temporary soreness, bruising or swelling can occur. Follow your clinician’s wound-care, activity and pain-relief instructions. Risks include pain, bleeding, infection, no usable sperm being found, another procedure being needed and, rarely, testicular injury. Retrieval is not guaranteed.

Call your care team

Seek prompt medical advice for fever, increasing redness or discharge, worsening pain, heavy bleeding, rapidly increasing swelling or difficulty passing urine. For a medical emergency, contact local emergency services.

Questions to discuss

Which cause of azoospermia is likely? Which method do you recommend and why? What are the chances of finding sperm in my case? Will sperm be used fresh or frozen? What is the plan if no sperm are found?

Sources for further reading

• Urology Care Foundation - Sperm Retrieval
• AUA/ASRM Guideline - Male Infertility, Part II

General educational information only; it does not replace advice from your treating clinician. Follow instructions specific to you.