

# Surgical Sperm Retrieval (SSR)



## Information for Patients and Partners

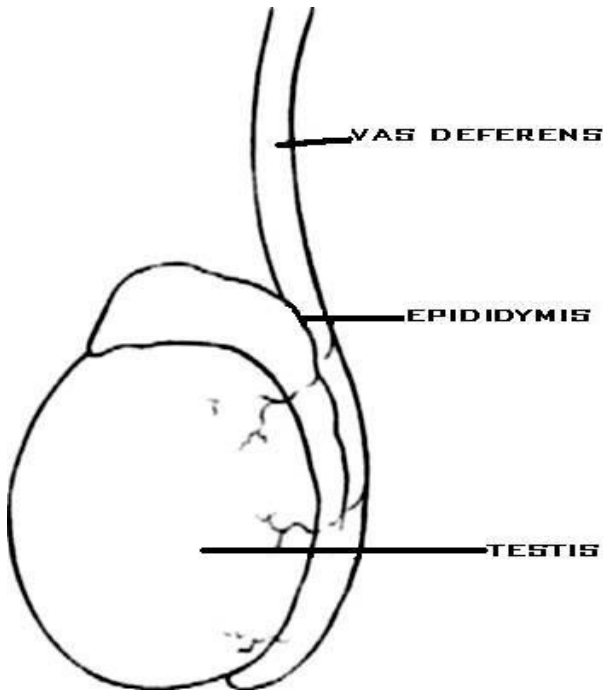


# What is Surgical Sperm Retrieval (SSR)?

**SSR** is a technique for collecting sperm from a man's testicles. It is a minor procedure, carried out as a day case under heavy sedation.

## Who needs SSR?

**SSR** is intended to help men who have no sperm in their ejaculate. This can be the result of a number of causes: a blockage in the vas deferens (the tube which carries the sperm to the penis); an absent vas deferens; or a blockage in the epididymis, (the structure connecting the testis to the vas deferens.) Most of these men produce healthy sperm in the testicles which can be retrieved by **SSR**. Unfortunately, some men have testicles that fail to produce any sperm at all (this is called primary testicular failure) and **SSR** is not a suitable procedure for this condition.



## Types of SSR

There are a few different types of **SSR**, and the cause of the sperm problem will determine which procedure is most suitable for you:

### PESA (Percutaneous Epididymal Sperm Aspiration)

**PESA** is a short, relatively painless procedure and requires no surgical incisions. A fine needle is inserted into the epididymis through the scrotum and fluid aspirated. This fluid is then inspected under a microscope for sperm count and motility. The procedure takes about 15-20 minutes.

### TESA (Testicular Sperm Aspiration)

**TESA** is performed if no sperm are found in the epididymal fluid. This is a short, relatively painless procedure and requires no surgical incisions. A fine needle is inserted into the testes and tissue aspirated is then examined for sperm similar to **PESA** procedure.

### TESE (Testicular Sperm Extraction) / Testicular Biopsy

**TESE / Testicular biopsy** is performed if no sperm are found in the **PESA** and **TESA** procedure. A small incision is made into the testis itself. A small sample of testicular tissue is taken which is examined for sperm. This procedure will cause some pain and tenderness, however full recovery is expected within a few days. A course of antibiotics is generally recommended. If necessary, tissue will be sent to histology laboratory to obtain full biopsy report.

## Effectiveness of SSR

The sperm retrieved are used on the same day if it is a fresh cycle of **IVF / ICSI** or sperm can be frozen. The freezing process does not affect the ability of the sperm to subsequently fertilise an egg. However the sperm retrieved are usually low in numbers, may not be mature and therefore cannot successfully fertilise an egg using standard **IVF** (In Vitro Fertilisation) technique. Because of this, the embryologist will pick

out a single sperm to inject into each egg and this procedure is called **ICSI** (Intra Cytoplasmic Sperm Injection).

If non-motile sperm are all that are available for selection, it is impossible to tell whether the sperm are alive or dead, so fertilisation rates will be adversely affected. In some cases, there may be no fertilization at all. It is also possible that no sperm at all will be obtained.

## What risks are involved?

**SSR** is a relatively low risk procedure. Possible complications include bruises, haematoma (collection of blood in testis), infection and anaesthetic risks.

Anaesthetic side effects include postoperative nausea and vomiting (usually last for 1-2 hours and can be controlled with medications), postoperative shivering, chest infection (very rare with sedation anaesthesia), awareness (becoming conscious during some part of operation; the majority of patients who are aware do not feel any pain, but may have memories of events in the operating theatre), allergic reaction to anaesthetic, very rarely anaphylaxis (risk is 1 in 10,000), risk of death or brain damage during anaesthesia (in general the risk is 1 in 100,000 but should be even rarer in sedation for minor procedures such as SSR)

## Prior to your procedure

- You will be required to complete consent forms for the procedure, storage and subsequent use of your sperm. This is usually done during your assisted conception clinic appointment.
- Please **DO NOT** eat and drink for at least 6 hours prior to the procedure.
- Chewing gum and smoking is to be strictly avoided.
- If you are on any regular medication, please let us know.
- Please call us on **0116 258 5922** a week before the procedure to confirm your presence on the allotted day of surgery.

## After your procedure

- Please wear reasonably tight-fitting underpants rather than boxer shorts after your procedure. This will provide some support to your scrotum.
- Showering is preferable to sitting in hot baths to prevent infection.
- Sexual activity is **NOT** advised for a week after the procedure.
- A follow up appointment in the clinic can be arranged prior to discharge with one of the consultant or nursing staff to discuss further management plan.
- If you have any doubts, please do not hesitate to contact Leicester Fertility Centre on **0116 258 5922**.

## What follow-up care is available?

We understand that this is a very difficult time for you emotionally. Should you wish to access any supportive counselling regarding your treatment or your fertility you may contact the counsellors on 0116 258 5922.

## Our commitment to patients

We are constantly striving to improve our services to patients, and we will welcome your comments or suggestions for improvement.

## Leicester Fertility Centre Contact Details

**Tel:** 0116 2585922

**E-mail:** LFCinfo@uhl-tr.nhs.uk

**Website:** [www.leicesterfertilitycentre.org.uk](http://www.leicesterfertilitycentre.org.uk)

## Useful addresses

Human Fertilisation and Embryology Authority: [www.hfea.gov.uk](http://www.hfea.gov.uk)

NICE guidelines: [www.nice.org.uk](http://www.nice.org.uk)

NHS - Response line: [111.nhs.uk](http://111.nhs.uk) / 111

NHS - Smoking helpline: 0300 123 1044

Fertility Network UK: [www.fertilitynetworkuk.org](http://www.fertilitynetworkuk.org) / 0121 323 5025

Do you feel that you are at risk of verbal or physical abuse? If so, you may find the following numbers useful:

Domestic Violence Helpline:

United against violence & abuse (UAVA)

Helpline: 0808 802 0028

Email: [info@uava.org.uk](mailto:info@uava.org.uk)

Text support: 07715 994 962



*This information was correct at the time of printing. While the Trust makes every reasonable effort to keep its information leaflets up to date, very recent changes may not be reflected in the guidance and you should discuss this with the clinical staff at the time of your appointment.*







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We all benefit from research. Leicester's Hospitals is a research active Trust so you may find that research is happening when you visit the hospital or your clinic.

If you are interested in finding out how you can become involved in a clinical trial or to find out more about taking part in research, please speak to your clinician or GP.

**If you need information in a different language or format, please call the number(s) below or email [equality@uhl-tr.nhs.uk](mailto:equality@uhl-tr.nhs.uk)**

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على هذه المعلومات بلغة أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل  
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Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

**0116 258 4382 or 0116 250 2959**