



MESA
***(Microsurgical Epididymal
Sperm Aspiration)***

***Information for
patients and carers***

**Fertility Centre
Aberdeen Maternity Hospital**

Some terms used in this leaflet

Azoospermia	when no sperm are found in the semen
Epididymis	a soft tube beside the testicle which carries and stores sperm
Hepatitis	a blood borne virus that affects the liver
ICSI	Intra Cytoplasmic Sperm Injection – using a fine needle, a single sperm is placed inside an egg to fertilise it. This is done with eggs collected during an IVF cycle
IVF	In Vitro Fertilisation
MESA	Microsurgical Epididymal Sperm Aspiration. A fluid sample is taken by needle from the epididymis and examined to see if sperm is present
Obstructive azoospermia	where sperm are being made in the testicle, but cannot enter the semen because of a blockage in the ducts
Scrotum	the sac of skin that holds the two testes
Semen	or ejaculate, which contains sperm and other secretions
TESE	Testicular Sperm Extraction. If there are no sperm found at MESA, then a small piece of tissue can be taken from the testicle and examined for sperm
Testicle	a smooth oval contained in the scrotum where sperm and testosterone are made

Background

1% to 2% of men have no sperm on ejaculation. This is called **azoospermia**. In about 50% of these men, sperm is being made in the testicles, but a blockage prevents the sperm from entering the ejaculate. This is called **obstructive azoospermia**.

What is MESA for?

MESA (Microsurgical Epididymal Sperm Aspiration) will be offered to you if the doctor thinks that you produce sperm, which are not being released with your ejaculate. By doing a MESA it allows us to bypass the blockage. These sperm can only be used for ICSI so before considering MESA as a couple, you should be sure you wish to progress to IVF/ICSI.

Screening

Before your sample can be frozen we must screen all patients for Hepatitis B and Hepatitis C as well as HIV (Human Immunodeficiency Syndrome). Information will be given to you and written consent is required before taking the blood sample for screening. This will be done at the Fertility Clinic.

If it is found that you do carry any one of these viruses, we cannot freeze and store your sample.

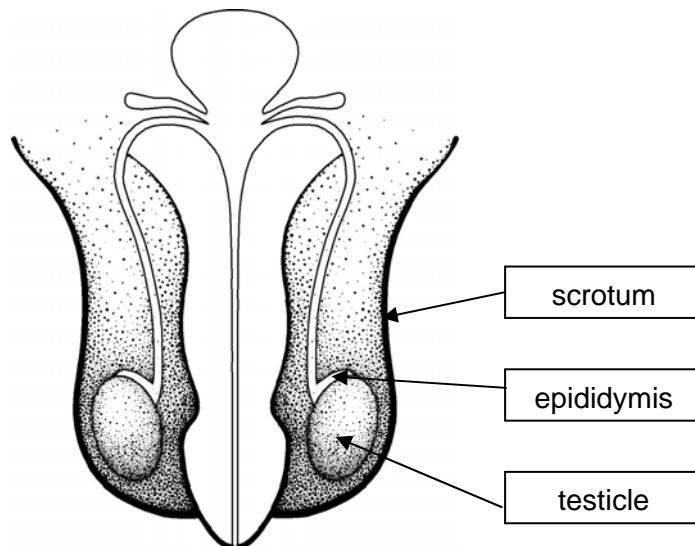
Funding

If you have previously had a vasectomy, you will be charged for the storage of any sample obtained at MESA.

How is MESA done?

- You will be admitted to Ward 42, Aberdeen Royal Infirmary where the doctor will see you and explain the operation.
- You need to sign a consent form to allow storage of any sperm obtained. This will be explained to you.
- MESA is usually done under a general anaesthetic, so you will be asleep.
- A small cut is made in the skin of the scrotum.

Using a microscope, a fluid sample is taken by needle from the epididymis and examined to see if sperm is present (see diagram below).



- If no sperm is found, then a small piece of tissue is taken from the testicle and examined for sperm (TESE).
- The cut is closed using dissolving stitches (which do not need removed).
- The sperm collected are usually then frozen, stored and used in an IVF/ICSI treatment.

What happens after the procedure?

- You will be asked to remain in bed for the first few hours.
- The doctor will let you know what was found before you go home.
- You will be seen again in the Fertility Centre to discuss the results and what they mean in full.

What happens after I go home?

- You must keep the wound clean by showering or bathing every day.
- Wear firm, supporting underpants night and day for one week after the procedure, you can remove these to bathe.
- No sexual activity for 2 weeks
- You might notice some blood in your ejaculate at first. This is normal.
- Most men can resume routine physical activity after 2 to 3 days, but you should avoid strenuous activity (such as cycling, running, swimming) for 7 to 10 days.

- Healing is usually complete within 10 to 14 days.
- The stitches may take 6 to 8 weeks to dissolve completely, but if they are uncomfortable your GP or practice nurse can remove them after 7 days.

Are there any after effects?

Complications such as bleeding or infection are rare, happening in less than 1% (1 in 100) of patients.

You may have a little bruising or tenderness for 24 to 48 hours.

How successful is a MESA?

Chances of obtaining sperm from a MESA are over 70%. If enough sperm cells are found then they can be frozen, stored and used to do ICSI in a future IVF cycle.

Further information

If you would like any further information regarding MESA
please contact:

**Fertility Clinic
Aberdeen Maternity Hospital
 (01224) 552719 **

This leaflet is also available in large print and on computer disk.

Other formats and languages can be supplied on request. Please call Quality Development on (01224) 554149 for a copy. Ask for leaflet 0310.

Feedback from patients and carers helped us to develop this leaflet. If you have any comments or suggestions about how we can improve this leaflet, please let us know.

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