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Sex & Fertility





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Testicular Cancer Treatment & Fertility

Q. What is sperm storage?

A. Storing sperm, also known as sperm banking, is the preservation of sperm by freezing. The sperm may then be used at a later date for artificial insemination or other assisted reproduction techniques.

Q. Why consider sperm banking?

A. Sometimes treatment for testicular cancer with a combination of surgery (unilateral orchidectomy) and chemotherapy may lead to temporary infertility and therefore sperm storage should be discussed before treatment.

If the cancer is cured but returns at a later stage and affects the remaining testicle it may need to be removed. This means men will not be able to father a child.

Even if a man does not plan to start a family, sperm banking is worth considering in case he changes his mind in the future.

Q. Where can a sperm bank or clinic be found?

A. Specialist healthcare teams will be able to advise men if the hospital where they are being treated has sperm banking facilities.

They can also provide men with information on their local fertility centre where they may be offered the opportunity to bank his sperm.

Sperm can be stored for 10 years or to the age of 55, whichever comes first.

Visiting the sperm bank or clinic

When a man first visits the clinic, the consultant or specialist healthcare team will discuss the process of sperm banking and answer any questions and concerns.

Men will be asked to provide a sperm sample, through masturbation, which will be frozen and stored. When a man is ready to have a child the semen is thawed and then used to artificially inseminate their partner. Prior to sperm banking men will also be asked to have blood tests to check for antibodies to the infectious viruses HIV, Hepatitis B and Hepatitis C. This is standard practice, and confirmation that they have not been exposed to these viruses will be needed before their sperm can be frozen.

Having any of the above viruses does not exclude men from storing sperm but further advice will be given.

To provide a sample, men may be required to make several visits to a clinic. It is advisable to abstain from ejaculating for three days before sperm storage to ensure the best amount and quality of sperm is obtained. Not everyone is suitable for sperm banking and a low sperm count, poor sperm quality, and the freezing and thawing process can all affect the quality of the sperm count.



Q. What is a normal sperm count?

A. On average, men produce 1.5 - 5 mls of ejaculate which may contain between 20 - 150 million sperm per millilitre. 60% of this sperm should appear normal.

Some men with testicular cancer have a low sperm count before they start treatment and sometimes in these men, successful treatment for testicular cancer can cause their sperm count to return to a more normal level.

However, men in this situation should still consider storing their sperm before treatment as their sperm count may sometimes get worse.

For men who are unable to store sperm it can, in some instances be extracted from the testicles using Testicular Sperm Extraction (TESE); a surgical technique which involves removing small pieces of testicular tissue under a general anaesthetic and checking for the presence of sperm. If sperm is present and is successfully retrieved, it can be used to fertilise an egg outside of the uterus via IVF.

In some instances the sperm removal can be performed at the time of orchidectomy. However this type of procedure does require a lot of preparation to ensure that the sperm is collected and prepared properly and will need to be discussed with the specialist healthcare team before an orchidectomy is performed.

Remember: only one healthy sperm is needed to father a child.

Q. What tests and consents are involved in banking sperm?

A. There are a number of tests and consent forms that men will need to complete including:

- If a man is under the age of 16 he will need his parent or guardian's permission to have his sperm treated and stored.
- Blood will be screened for HIV, hepatitis B and hepatitis C.
- Men will need to confirm what they would like done with their sperm in the event of their death.



Q. Following cancer treatment, what happens if tests show that a man is fertile?

A. They will need to discuss the results with their specialist healthcare team. They may wish to have the stored sperm destroyed. If a man's sperm count is still low, his sperm can be stored on an ongoing basis if desired.



Q. What costs are involved in storing sperm?

A. Currently, the NHS will pay for the costs of the initial consultations, blood tests and storage of sperm and most centres will have cover to store sperm for up to 3 years.

Funding for further treatment is under review and men should discuss this with their specialist healthcare team as it can be more expensive to store the sperm longer term.

Q. What happens to a man's stored sperm if he moves away from the area where he was originally treated?

A. Men must ensure the clinic and their GP are provided with their new address details as they will need to be contacted in the future. Men do not need to move stored sperm. However should they need to use it they can contact the facility where the sperm is stored and arrangements can be made to access it.

Sperm will be destroyed if no longer required for use after 10 years.

Treatment for testicular cancer will vary according to the type and stage of a man's cancer. Every case will vary but the vast majority of men will be able to father a child.

Treatment options: what are they and how will they affect a man's fertility?

Orchidectomy

Removing the affected testicle(s) and tumour by surgery is the standard treatment for testicular cancer.

Having one testicle removed (unilateral orchidectomy) should not adversely affect sexual performance if the other testicle is healthy However a man may be advised to perform sperm banking prior to an orchidectomy in certain circumstances if it is likely that further treatment with chemotherapy is likely to be needed afterwards or there is a possibility that the other testicle might be producing a low level of sperm.

Providing the cancer has not spread beyond the testicle further treatment may not be needed and men may move on to a programme of surveillance; regular blood tests, scans and hospital appointments.

Should cancer reoccur treatment with chemotherapy will be given and will usually cure most men.

Chemotherapy

Chemotherapy treatments are drugs used to kill cancer cells or stop them multiplying and this type of treatment can be given through a plastic tube or cannula (drip) or in tablet form.

A small dose of chemotherapy can be given after orchidectomy to reduce the risk of any cancer returning provided that it is has been caught at an early stage.

A longer course of chemotherapy is given for cancer which has spread to other parts of the body.

There are a number of possible side effects that chemotherapy treatment may cause, including lowering the number of sperm that the body produces. This may cause temporary infertility during treatment and, in rare cases, permanently. Men who are having chemotherapy in will therefore be advised to store sperm.

The effect of chemotherapy on sperm is uncertain and there is no evidence that chemotherapy given to a man can harm any children born subsequently. However most specialist healthcare teams would advise men not to father a child for about a year after treatment.

It is not known how much chemotherapy may be present in the semen during treatment and there is a risk that partners may be exposed to chemotherapy during sexual intercourse. A condom is therefore recommended or if this is not possible men may need to avoid sex while receiving chemotherapy.

Radiotherapy

Radiotherapy uses high energy beams of radiation to destroy cancer cells and has been used in the past to minimise the risk of seminoma returning by giving radiation to lymph nodes situated in the back.

This type of treatment is used less today and research has shown that both radiotherapy and a single dose of chemotherapy are as effective as each other at reducing the risk of early stage seminoma testicular cancer recurring in the future.

Radiotherapy will not normally affect a man's fertility but storing sperm may still be recommended.

Retroperitoneal Lymph Node Dissection

Retroperitoneal Lymph Node Dissection (RPLND) is an operation which is performed to remove residual disease or tissue following chemotherapy from the lymph nodes in the abdomen.(See RPLND Information Sheet).

This procedure can sometimes damage the nerves that control ejaculation and rarely can leave men unable to ejaculate normally. The sperm will not be released by the penis but will flow back into the bladder via the urethra, or water pipe (retrograde ejaculation) making them infertile.

In these cases men should consider storing their sperm before surgery, if this has not already been performed. In some instances however, it is possible to retrieve sperm from a urine sample which can then be subsequently used.







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