Sperm storage for patients having cancer treatment

Introduction
This leaflet provides information to help you understand and decide if you may wish to store samples of semen before any radiotherapy or chemotherapy treatment.

These treatments may reduce your sperm quality and therefore sperm banking gives you the opportunity to father a child at a later date, if needed.

Please read this leaflet carefully. If you have any further questions please contact a member of the team at the Oncology Centre. The telephone number is at the end of this leaflet.

Why sperm storage?
Radiotherapy and chemotherapy can cause infertility. In some cases this is temporary, but there is a possibility that it may be permanent. This could mean that you may no longer produce sperm in enough numbers, if at all, in order for you to father a child. We therefore offer sperm banking, whenever possible, before treatment begins. This may allow you to father a child after treatment if your own semen samples do not return to normal.

How are the samples collected?
Semen can be produced at home, directly into the sterile plastic pot provided to you and taken to the Edward Jenner Laboratory at Gloucestershire Royal Hospital within 1 hour of production.

The sample should be kept in a pocket on your clothes and not allowed to get hot or too cold.

Alternatively, the Gloucester laboratory has private facilities with an en-suite toilet where the sample can be produced. If possible, we would like to collect and store 3 samples before the start of your treatment. Ideally, these samples should be produced 2 days apart.
When arriving at the laboratory to drop off your sample or use the facilities, please report to reception at the Edward Jenner Laboratories at Gloucestershire Royal Hospital. On your first visit, please bring some form of photographic identification such as your passport or driving licence.

**What is the process of sperm storage?**

Before you can store your sperm, you will be asked to complete some paperwork. These are mainly consent forms which make your storage legal and allow us to communicate with your doctor and other professionals involved in your care.

Each sample of semen will be dispensed into a number of ampoules (small plastic sterile containers) which are labelled and coded for identification. The ampoules will then be placed in 2 separate tanks and stored in liquid nitrogen (at -196°C) within the Microbiology Department of this Trust.

These tanks are regularly monitored and linked to the Gloucestershire Hospitals Switchboard in case of emergency.

This storage facility is free of charge and every effort will be made to keep your samples safe.

We cannot, however, accept any responsibility for loss or damage due to equipment failure.

In the unlikely event that your samples were damaged or destroyed during an accident you will be informed. If, due to technical or staffing problems, we are unable to store your samples, we will make every effort to get them stored at another licensed centre.

**Which samples are suitable?**

There are a number of factors, illness included, which can affect the quality of sperm even before treatment starts. Provided there are at least a few sperm present, each sample will be frozen and stored. However, if during your first visit there should be no sperm present storage would not be possible. This will be discussed with you by a nurse or doctor.
How long can my sperm be stored?

Generally sperm storage is allowed for 10 years. However, in cases where permanent infertility or sterility is likely, we can store your samples for up to 55 years provided we get a form signed every 10 years from a consultant or medical doctor stating that your fertility may still be impaired. This may involve you producing a further semen sample for testing.

We will write to you on a regular basis to ask if you wish your samples to be continued to be stored.

This is also your opportunity to tell us about any changes in your circumstances that may mean that your original consent forms need to be updated. Examples include you having a partner for the first time or a change of partner.

It is your responsibility to make sure that your storage wishes remain up-to-date. You can withdraw consent for storage at any time or change your consent form if your circumstances change. It is very important that we are able to keep in touch with you, so please remember to let us know if you move house.

We will also contact you to let you know when your storage period is due to expire (end).

What are the implications of freezing sperm?

Artificial insemination using frozen sperm has been carried out for many years. There is no evidence to suggest any risk of abnormality in babies associated with the use of frozen sperm. We cannot however guarantee a pregnancy outcome from using the stored samples as there is some loss of fertilising ability in sperm samples from the process of freezing and thawing. The fertility of the frozen samples is therefore a combination of how good the samples were when they were frozen and the impact of the freezing process on the sperm.

However, with good quality samples and modern techniques there are very good chances of achieving a pregnancy.
Will I need any other tests?

Yes. The Human Fertilisation and Embryology Authority (HFEA) have made it mandatory before storage to have a test for HIV, Hepatitis B and C.

This is to comply with their ‘Safe Cryopreservation’ guidelines and avoid any contamination risks. A blood sample will be taken at the same time as your first sperm sample collection. Regardless of the results, your samples will still be stored. If you have any concerns about these tests, or the results, please discuss them with your nurse, or you will be able to see a counsellor at any stage of your treatment process.

What happens if I want to use my samples?

Should you wish to use your sperm to attempt a pregnancy, you should contact the Clinical Oncology Centre and arrange an appointment to provide a sample for a sperm count.

If your count has been affected by your treatment and it is necessary to use your frozen samples there will need to be a detailed check of the sperm quality of the stored samples. These complicated tests are only done at large fertility centres such as those in Bristol, Birmingham and Oxford and we may need to ask you to take a small portion of your stored sample to a centre such as this for testing.

The tests will be able to identify the exact quality and fertility of the frozen sperm when it is thawed out.

The tests will also help decide whether it is necessary to consider using a technique called In Vitro Fertilisation (IVF) or whether the samples are suitable for insemination. In either case, these procedures are best done in a specialised fertility centre.

You should be aware that these and any following infertility treatments are often not funded by the NHS and that you may be required to pay for this yourself. The cost of fertility assisted conception treatments depend on the exact technique used. For further information please visit www.hfea.gov.uk. However, some couples are eligible for fertility treatment funded by the NHS if they meet certain criteria. This can be discussed with your GP if the need arises.
What are the conditions of storage?

There are statutory (legal) regulations, which govern sperm storage. These are controlled by the HFEA, which was set up by Parliament in 1990. The law requires that you consent to the storage of your sperm and its future use.

We are normally allowed to store sperm for 55 years, subject to appropriate consent forms and medical statements having been completed. These sperm are stored only for your use.

In the event of your death, provided consent was given at the time of your sample storage, we will be able to continue to keep your samples in storage for your partner’s use. We would then continue to contact your partner about their requirements regarding the samples.

At the end of the consented storage period, if the samples have not been used or previously discarded with your consent, we will have to destroy your samples.

We will make every effort to contact you at this time, but if we do not succeed we will discard your samples without your consent.

The Clinical Oncology Centre will be happy to arrange annual analysis (testing) of fresh semen after your treatment to check whether you are still fertile.

You will have to give instructions regarding what will happen to your sperm in the event of your death or mental incapacity. Provided you have consented, you can also have your details recorded on the register of births as the legal father of a child born as a result of fertility treatment after your death.

Do I need counselling?

Because the decision to have sperm storage may need to be taken quickly so that your treatment is not delayed, it may be useful to have someone to talk to before making a decision.

Counselling provides an opportunity to discuss any concerns you may have about your treatment and blood results, their implications for you or infertility generally.
However, you do not have to accept offers of counselling if you do not feel it would be helpful, and you can still have your sperm stored.

Counselling offered is not the same as:

- the information given to you about procedures and consent
- the normal relationship between clinician and patient which includes giving professional advice

Counselling is intended to give emotional support at this time when stress might be high because of coming to terms with your diagnosis and having to think about long term future hopes and plans.

A member of staff can arrange a referral for you to speak to a qualified, accredited infertility counsellor at the Oxford Fertility Centre. It may be something that you want to think about and come back to. If you wish to see the counsellor at any stage throughout your treatment, staff will be happy to help you arrange it.

**Confidentiality**

We have a legal duty of confidentiality imposed on us by the Human Fertilisation and Embryology Act 1990. All staff adhere to this and information regarding your preserved samples will only be released with your consent.

**Contact information**

If you have any questions or concerns, please contact any of the following:

**Gloucestershire Clinical Oncology Centre**
Cheltenham General Hospital
Tel: 0300 422 4028

Your consultant is: __________________________
Tel: 0300 422 __________________________

Your nurse contact is: __________________________
Tel: 0300 422 __________________________
Further information

Microbiology Department
Tel: 0300 422 5050
Monday to Friday, 9:00am to 5:00pm

The Human Fertilisation and Embryology Authority
Tel: 020 7291 8200
Website: www.hfea.gov.uk

Making a complaint

If you wish to make a complaint about any part of your treatment either at the oncology centre or the laboratory, please contact either:

Dr Alan Lees (Consultant Microbiologist)
Microbiology Department
Gloucestershire Royal Hospital
Great Western Road
Gloucester
GL1 3NN
Tel: 0300 422 4066

Patient Advice and Liaison Service (PALS)
Gloucestershire Royal Hospital
Tel: 0800 019 3282

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