



The Leeds Centre for
Reproductive Medicine

Sperm Storage for Fertility Patients

Welcome

This booklet has been written to help fully inform you of the purpose and techniques of this procedure. It is important that you read this in combination with your IVF -ICSI booklet. Please ask for clarification and let us have your comments and suggestions for future editions. It is important that you read and understand all the material as our intention is to keep the risk of an error in treatment at its minimum.

HOW TO CONTACT US

Address:

The Leeds Centre for Reproductive Medicine
Leeds Teaching Hospitals NHS Trust
Seacroft Hospital, York Road
Leeds, West Yorkshire LS14 6UH

Telephone:

- ❖ Monday to Friday (8.00am to 5.00pm):
 - Administrative queries: **0113 206 3111**
 - Clinical queries: **0113 206 3102**
- ❖ Saturday, Sunday & Bank Holidays (8.00am to 12.00pm):
 - Clinical queries only: **0113 206 3102**
- ❖ In an emergency:
 - During working hours ring The Centre on the direct line.
 - Outside the above hours please ring the St James's Hospital switchboard: **0113 2433144**
You will be put through to the duty person for The Leeds centre for Reproductive Medicine or go to a local Accident and Emergency department

Fax: 0113 206 3101

Email: leedsrmenquiries@leeds.nhs.uk

Website address: www.leedsreproductivemedicine.co.uk

Ethnic Minority Languages: We will be pleased to organise a session (with prior notice) for an official translator / interpreter (if available) to translate the contents of this booklet.

Welcome to The Leeds Centre for Reproductive Medicine (LCRM)

This booklet has been written to help you understand the purpose and method of sperm storage. We hope that it will answer some of the questions that you may have before, during and after your treatment. If you have further questions, comments or queries that still remain unanswered then please let us know and we will try to provide you with a clear answer.

We will try not to swamp you with technical terms but please ask us to explain if we unknowingly do so. It is important that you help us too by reading all the material we give you and understanding all aspects of sperm storage including the current law.

We see ourselves as caretakers of your gametes that we are storing on your behalf. The law gives you the entire right and the responsibility to decide what should happen to your sperm. We need to look at all possible future circumstances and ask you to record your wishes so that they could be followed strictly.

Introduction

Regulation of Sperm storage

The storage of gametes is regulated by the Human Fertilisation and Embryology Act of 1990 and 2008, there are a number of guidelines and requirements that must be met before gametes can be stored. It is important that all those involved i.e. the patient, the referring clinician and the unit staff fully understands and complies with the law.

Storage of Mature Sperm for Your Own Use

The following information is for your guidance. For further information please refer to the Human Fertilisation and Embryology Authority (HFEA) website www.hfea.gov.uk

- 1) A licence is required to store mature human sperm.
- 2) The patient's right to confidentiality in this act prohibits the normal exchange of information between clinicians without specific written consent unless it is deemed necessary for your continuing medical care.
- 3) Before consenting to the storage of sperm you will receive all information and may wish to receive further counselling regarding the implications of taking the proposed steps. This would include an oral explanation supported by relevant written material such as this booklet.
- 4) Anyone consenting to storage of their sperm must give their consent in writing prior to the storage.
 - i) ***NB Sperm should not be taken from anyone who is not capable of giving their consent. However, a person under 18 years old can, in exceptional circumstances, give consent if it is the intention to use the sperm/ tissue solely for their own treatment and in their life time. It is not essential to obtain the consent of his parent or guardian under these circumstances although we always endeavour to do so. The sperm have to be discarded if the patient does not survive.***

Consent:

The consent must specify one or more of the following:

- 1) *'whether the treatment is provided for themselves, or themselves and a named partner*
- 2) *whether the treatment is provided for others*
- 3) *whether any sperm or testicular tissue obtained can be used for research'*
- 4) the maximum period of storage is up to 10 years. There may be possibility of extension after 10 years and up to your age of 55 years, but this will be only in specific cases and each case is judged by us on its own merits.
- 5) what is to be done with the sperm in the event of individual's death or becoming incapable of varying or revoking his consent. This is a legal requirement.

Notes from the HFEA Code of Practice:

- 1) **Audit:** Centres HAVE TO carry out a periodic review of the status of stored gametes. This is to reconcile the centre's records with the sperm sample in storage. It is also to review the purpose and duration of storage and to identify any action that may need to be taken.
- 2) **Counselling:** This service is available to all patients undergoing treatment. It can be for discussion of implications, support or therapeutic in nature.
- 3) **Posthumous use of sperm:** Every man storing sperm is required to clearly state his wishes regarding the stored sperm in his consent. The consent signed in the man's own life time is the only one that can be followed. A difficult situation can arise when a recently bereaved partner returns to the unit requesting the use of these gametes but where a legal consent for this to happen does not exist and when such treatment will not be possible. It is a responsibility of the person storing the sperm to provide directions as to what they wish to happen in the event of their death..
- 4) **Legal Parenthood in the event of posthumous use of sperm:**
 - a) Whenever gametes are used posthumously, the man to whom the sperm belongs must have consented in writing for the stated purpose beforehand.

- b) The unit will and must legally consider the rights of the unborn child/children in deciding whether or not to conduct treatment.
 - c) Any child born with the posthumous use of the sperm cannot be regarded legally as the child of the individual to whom the sperm belonged without the prior completion of birth registration details on the HFEA form.
- 5) **HIV, Hepatitis B,C & Syphilis Screening:**
- a) We are required to screen all patients, donors and recipients for HIV, Hepatitis B, C and Syphilis prior to sperm storage.
 - b) Counselling is available prior to undergoing the screening tests.
 - c) The sperm sample is stored in containers that have other similarly screened and negative samples.
 - d) There is a very small theoretical risk of cross-infection when unscreened samples are stored in the same containers. It is however important to note that such an incident has never been reported in the past.
 - e) At the present time we are unable to offer treatment services to individuals who test positive to HIV, Hepatitis B or C.
 - f) By ensuring that we are aware of the HIV and Hepatitis status of our patients we can provide a safe environment for your sperm whilst in storage.

What Happens?

Referral to The Leeds Centre for Reproductive Medicine (The Centre)

Sperm storage can be considered soon after a decision has been made by you after a recommendation by the doctor. The steps are as follows:

- 1) Your doctor will;
 - a) Arrange the hepatitis B, C and HIV and syphilis screening
 - b) Contact The Centre during the working hours (see front page for details) for an appointment.
- 2) The doctor will discuss options, check results, take or arrange for HFEA and LTHT consents for storage of sperm to be taken and arrange then for the embryologist to see you. This may occur in the same visit.
- 3) The embryologist will take you to the appropriate private rooms where after appropriate instruction you will provide your first sperm sample for storage.
- 4) The sperm sample will be stored in small aliquots (portions) in the suitable container for long term storage.
- 5) You will be sent an annual review appointment for discussion regarding this sample, your current fertility at that time and any issues that have arisen since diagnosis and treatment. You will also be advised regarding the probable chances of your sperm surviving after freezing and thaw.
- 6) You will then receive annual letters from us which ensure that you keep us informed of your intentions regarding the stored sperm.
- 7) Once the samples are no longer required by yourself, you would be expected to advise the trust to discard the sperm.
- 8) If it is felt that there is no clinical indication for continued storage of sperm, you may continue storage irrespective but there is a cost involved as per trust procedures for voluntary sperm storage. We can provide you with the current annual cost at the time.
- 9) Currently there is a cost for sperm storage **as the Primary care Trusts (PCTs) responsible for your NHS treatment do not fund this.**

Some of these steps are discussed in further detail below:

Initial Consultation in The LCRM

- 1) A doctor specialising in assisted conception, would have advised you to bank some sperm for treatment and explained the implications and conditions regarding storage.
- 2) You will be requested to complete a consent form after due consideration of the implications.
- 3) The **consent form** is completed on the understanding that the terms of consent can be changed or varied at any time in accordance with the law of the land and the NHS regulations.
- 4) Written consent is also required to enable the unit to contact the referring clinician should this be necessary in the future.
- 5) Contact with persons not covered by a HFEA treatment licence is normally prohibited under the terms of the HFEA Act unless the patient has given written consent specifying the persons who can be contacted.
- 6) It will however be important to understand that NHS funding may not be available when the samples are to be put to use and that you may have to self fund your treatment such as in-vitro fertilisation of eggs, intra-cytoplasmic sperm injection, embryo replacement and other related procedures which may be required.

Semen sample and storage

You will be seen by an embryologist after consultation with the doctor, and once your screening results are available. This will require an appointment at a mutually convenient time when you will attend here and provide a sample by masturbation. The sample will be subjected to

basic semen analysis to establish the volume, concentration and motility of the sperm prior to freezing. Depending on the quality of sperm, further appointments may be made by the embryologist after 2-3 days for additional samples.

How long can my sperm be stored?

Sperm can be stored for up to 55 years, but this is conditional on a review by a doctor every 10 years to determine your eligibility for extended storage.

What are the prospects of using frozen sperm?

The success of using samples depends on the quality and quantity of the sperm, which was stored. Men who have been very ill systemically e.g. with persistent fever, weight loss, loss of appetite etc. generally have very poor sperm samples and sometimes may have even switched off their sperm production completely. Therefore the quality of sperm samples obtained is very variable between patients and depends on individual circumstances. We will always offer you the chance than make judgements ourselves.

The samples are diluted with a preservative when they are frozen to protect the sperm against damage during the freezing process. However this does not guarantee the sample will survive the freeze-thaw process, and even if it does, there is usually a reduction in the motility of the sperm. As previously stated the chances of success in achieving a pregnancy depend on many factors including the method chosen for their use. If sufficient numbers of sperm of adequate quality have been frozen then we would expect you to have a reasonable chance of achieving a pregnancy **BUT** this cannot be guaranteed.

- 1) The Centre also cannot use sperm for anybody else other than the patient and his named partner. This is an extremely important factor that you, your relatives and your partner must consider before signing consents and storing sperm.

Other factors:

It is impossible to predict what will be possible with the technology of the future and this makes it difficult to define limits below where it will not be possible to preserve sperm. However if the laboratory staff feel that the prospects of sperm survival are negligible in the current state of medicine, then it is not advisable to proceed with storage. Each case is judged on its own merits and there may be variations.

There is a small but theoretical risk that samples may be lost during the freezing and thawing process or due to equipment failure with the freezers. The samples are stored in special containers within liquid nitrogen. These containers have alarms in case of failure and so the risk of loss or damage to a sample is very small, nonetheless the possibility does exist.

Follow up:

- 1) Every twelve months, The Centre will write to you to ask if continued storage is required.
- 2) If you wish the samples to be destroyed, the unit will require a written confirmation of this request, preferably in the patient's or legal guardians own hand.
- 3) It is your responsibility to ensure in writing that we are kept informed of any change in address if continued storage is expected. Failure to keep regular yearly contact with the unit may result in the samples being discarded.
- 4) Please note that failing to respond to the Trust's communications or paying the annual storage fee will also result in your sample being discarded.
- 5) In the event of your death we are legally obliged to discard all samples stored in our Centre unless your consents state otherwise.
- 6) The unit operates a bring forward system, which will alert the centre in good time that particular samples are about to reach the end of the statutory or agreed period of storage.
- 7) We will try to make all reasonable effort to contact you but it is also your responsibility to ensure that you take a responsible and proactive approach to your stored material and renew or discard your samples as required.

What costs are involved?

- 1) **At the present time there are charges made for this facility.**
- 2) We can provide you with the current trust price when storage is contemplated. Please also note that these prices are subject to periodic change as the trust deems fit.
- 3) Many infertility treatments are not NHS funded and are usually funded by the patients themselves.
- 4) We do not envisage that any change would occur from our current position in the near future. However we cannot guarantee any future change in this situation.

We hope that this provides you with all of the information needed. Specialist counselling can be arranged when needed. You are welcome to ask questions that arise during the course of reading this booklet.

Best wishes for your forthcoming treatment.

Mrs Vinay Sharma; Mr Anthony Rutherford; Professor Adam Balen