



SOUTH WEST CENTRE FOR REPRODUCTIVE MEDICINE
OCEAN SUITE - LEVEL 6
Derriford Hospital
Plymouth PL6 8DH

Tel. (01752) 763704 : Fax (01752) 763641
e-mail: jackie.waugh@phnt.swest.nhs.uk - www.derriford.co.uk/ivf

INFORMATION ON PRESERVING FUTURE FERTILITY FOR CANCER PATIENTS

1. SPERM CRYOPRESERVATION FOR MEN

What is Semen Cryopreservation?

Cryopreservation (freezing) of semen enables sperm to be kept in storage for a number of years after which they can be thawed and may be used to conceive a child. The technique can help men who may be undergoing chemotherapy or radiotherapy, which could result in a decrease or sometimes complete loss of sperm production.

How is the Sperm Sample Collected and Frozen?

The semen sample is collected by masturbation in a designated quiet room that we have in the Unit. We prefer that samples be collected on site as that eliminates any problems, which may occur during sample transport to the Unit. You will be given a form to complete and hand in with your sample.

Once the sample has been assessed, we mix it with a special liquid that will protect the sperm from the cold temperatures and then freeze the sample in several small vials. The sperm samples are kept at very low temperatures in storage vessels. The temperatures of these vessels are continuously monitored and they are connected to alarm systems that will alert one of the staff if there is a problem with one of the tanks.

What Can Cryopreserved Sperm Be Used For?

If, at a later date, your fertility had not returned following your treatment, you may wish to use the frozen sperm in an attempt to start a family. If this were the case, some form of assisted conception treatment would be recommended. The treatments available would depend on the quality of the samples stored and this would have to be established at a consultation with a doctor at Ocean Suite.

What are the Risks of Sperm Cryopreservation?

As the sperm sample undergoes the freezing, and later, the thawing process, there are physical and chemical changes in the sperm membrane which can result in them being damaged. The damage causes them to become non-viable. A proportion of the viable sperm seen in the semen sample before freezing will not survive the freeze-thaw process. Consequently, the final number of viable sperm found after thawing will depend somewhat on the number of viable sperm present in the original samples. Therefore, if it is possible, before you start your treatment, we will usually ask for at least two samples to be frozen, as having more than one sample will give you more options and opportunities for future treatments.

The Regulations

Freezing and storage of sperm samples is monitored and licensed by the Human Fertilisation and Embryology Authority (HFEA), which also governs most treatments for infertile couples, such as IVF or “test-tube babies”. In order to offer sperm freezing to patients we are required to obtain your **consent** for the sperm to be stored. Part of this consent also requires you to decide the period of storage and the more difficult question of the outcome of the stored samples in the event that anything were to happen to you. If you are under 16 both yourself and a parent (or guardian) will have to sign the consent. This will be discussed and completed when you visit us at Ocean Suite.

It is important to note that any **consent and wishes indicated on the forms can be altered or even withdrawn at a later date (as long as this is documented in writing)**, providing the sperm have not already been used for treatment.

We are only allowed to keep frozen semen samples for the period specified on the consent form. At the end of that period, if we cannot contact you or renew your consent, your consent to storage effectively expires and we are obliged by law to discard the samples. It is essential that you keep us informed of any change in address and return the form specifying your wishes for the sample. **If we are unable to contact you your samples may be discarded.**

2.TREATMENTS FOR WOMEN

Options for women are limited and require complex interventions in most cases. A women’s eggs, embryos or ovarian tissue maybe frozen and used at a later date.

However, attempts to store any of these samples will result in the need to delay treatment and in some cases, whilst the option to store for the future is available it is not appropriate for some individuals. For this reason it is always necessary to discuss the options fully with the Ocean Suite at Derriford so that you can understand the requirements and then talk to your consultant at Torbay to discuss the implications of delaying your treatment.

For example, if a woman is in a stable relationship and they are thinking of having a family, embryo cryopreservation maybe an option. This would entail undergoing a cycle of IVF (In vitro fertilisation). The woman would undertake a cycle of super ovulation where they are stimulated with drugs to produce many follicles (and eggs). The eggs are retrieved and fertilised with the partners/husbands sperm. Any resulting embryos can be frozen and stored for future use. Currently this is the only treatment we offer at Derriford but we can arrange for the other treatments to take place a specialist clinic.

3. WHAT OTHER ISSUES ARE THERE TO CONSIDER?

The process of sperm and embryo cryopreservation itself is not complicated, however the implications for the future of the samples are more involved. You may have questions, concerns or worries about the samples, which we would be happy to discuss with you. We also have a counsellor who is actively involved with the Unit and would be happy to discuss any issues relating to the treatment you have or will be receiving. There is no charge for this counselling, and you may take it up at any time.

Please contact us on 01752 763704 (main number) or 01752 763 688 (Lab).