



Egg Freezing

Thank you for choosing LCRH to help you along your fertility pathway. We know that there is a lot of information to digest before you can start treatment and we hope this will help to answer some of your questions. Don't forget that our team are always available to speak to you about any queries you might have.

Why should you consider egg freezing?

Today, more and more women are delaying starting a family until later in life due to personal, social or career circumstances. As techniques and technology continue to evolve, egg freezing has become an increasingly popular method of preserving fertility as freezing your eggs at a younger age may offer a better chance of a successful pregnancy in the future. At LCRH, we ensure that you have all the information you need to make an informed decision about your current choices and potential future outcomes.

How to use this booklet

This booklet has been designed to be read after your individualised treatment plan has been agreed with you and your consultant and before you sign consents to treatment.

- Take time to read and digest your information pack including the information leaflets and consent forms.
- Ensure before you have signed your consent forms that you have been provided with enough information to understand the nature, purpose and implications of your consent to treatment.
- Please bring or send any screening blood tests you may have had done elsewhere ahead of this appointment if you have not done so already.

Your nurse consultation appointment

This will last approximately 30 minutes and give you the opportunity to meet one of our specialist nurses. Our nursing team are available throughout your treatment should you need any advice, help or support during your treatment with us. During your appointment we will:

- Organise a personalised treatment schedule which will document which medications (if any) you will be taking, the dose and when they start.
- Explain what will happen during your treatment.
- Finally, your nurse will check that if all your queries have been answered that your consent forms have been completed correctly and signed

Introduction

Egg freezing is a method of storing a woman's unfertilised eggs, with a view to them being used in the future. It may be seen as a way of preserving the potential for fertility, in women who are not in a position to become pregnant, or whose fertility is at risk. The eggs undergo a freezing procedure in the laboratory called vitrification. This involves freezing the eggs by a rapid process that extracts the fluid from the eggs to prevent crystal formation. Once vitrified, eggs may be stored for any period up to a maximum of 55 years from the date they are first placed in storage. However, you will need to renew your consent every 10 years, therefore, you must keep your contact details up to date with us.

How many eggs do I need to freeze?

The success of techniques like IVF are dependent on two main factors.

- The age at which treatment takes place.
- The number of eggs the ovaries can produce.



With egg freezing there is an additional factor to consider which is the chances of eggs thawing successfully so all of these factors need to be taken in to account when thinking about the outcome of treatment and perhaps the numbers of eggs needed to be frozen.

Current thinking is that women 35 and under should try to freeze 20 eggs and women over the age of 35 20-30 eggs. However, it should be noted that a woman's ovaries may respond very differently to stimulation than others. Sometimes this means that multiple egg freeze cycles may be required to achieve this number.

- An estimate as to the thaw rate for oocytes is approximately 90%
- Of those eggs surviving the thaw approximately 60-70% will fertilise normally with ICSI
- Of the eggs that fertilise approximately 40-50% will convert to embryos suitable for use

However, it is important to understand that these are average statistics and there is no guarantee of embryos being created after egg freezing or of pregnancy.

Once eggs have been frozen and thawed ICSI is required for fertilization. This is a technique whereby individual sperm (your partners or donor sperm) is injected into the egg.

Information on the treatment cycle

Egg freezing is very similar to IVF in terms of preparation the difference being that once eggs are collected, they are frozen unfertilised.

There are several steps involved in this process.

1. Stimulating the ovaries
2. Control of ovulation
3. Egg collection
4. Freezing of oocytes

Stimulating the ovaries

This is normally achieved with a hormonal injection called FSH (follicle stimulating hormone). This is the hormone that usually drives the production of a follicle in the normal menstrual cycle. Sometimes some preparations are used that also contain a hormone called LH (luteinising hormone). These injections are given daily as a subcutaneous injection.

Control of ovulation

Once follicles reach a certain size in the menstrual cycle (usually around 17mm or above) then a surge of LH hormone will normally occur allowing the release of an egg to take place. For IVF treatment eggs need to be collected so it is necessary to control this process by stopping the release of LH. This is achieved either by drugs such as fymetostatin or cetrorelix.

Egg collection

As the ovaries are being stimulated with FSH injections the response to this medication is being measured by ultrasound scans. Once there are sufficient follicles of large enough size a trigger injection is given to mimic the LH which would normally be released at ovulation. This allows the genetic material within the egg to divide. Egg collection is then timed for approximately 36 hours after this time.

Egg collection is done transvaginally in much the same way as a transvaginal scan. The procedure normally takes 30 minutes, but we need you to be here in the clinic 30 minutes ahead of your appointment time so that you can

- Be admitted
- Sign consent
- Meet our anaesthetist

Freezing of Oocytes

Any mature eggs collected are frozen by a process called vitrification shortly after egg collection



Treatment protocol

The antagonist cycle is the quickest and safest way of preparing for egg collection.

Antagonist cycles

This is one of the common cycles used for ovarian stimulation. It provides a flexible approach to stimulation particularly for patients at risk of ovarian hyperstimulation syndrome (OHSS). This is because a different trigger injection can be used (called busserelin) which radically reduces the chances of developing this condition.

- Norethisterone tablets 5mg twice daily commence around day 15 of your cycle.
- These are used for 10-14 days.
- Once it is stopped you will get a withdrawal bleed similar to a period and a scan day 1-3 is booked.
- FSH injections start on day 1 - 3 of this bleed.
- Your next scan is normally day 5 or 6.
- Depending on your response on day 5 or 6 of your FSH injections GnRH injections are started (commonly fyremedal or cetrotide)
- Scans are then booked according to response and generally every 2-3 days.
- Once there are sufficient follicles of large enough size a trigger injection is given to mimic the LH which would normally be released at ovulation. This allows the genetic material within the egg to divide. Egg collection is then timed for approximately 35-40 hours after this time.

Please feel free to ask any member of the team any questions that you have after reading this information. You may find visiting the HFEA's website also helpful – www.hfea.gov.uk

Reasons a treatment cycle may be cancelled:

- Occasionally a baseline scan may show that it is not favourable to commence a treatment cycle e.g. the presence of a large cyst in the ovary
- Sometimes the ovaries may under-respond to stimulation, that is not enough follicles form to go ahead with egg collection.
- Occasionally the response to stimulation is excessive and we may occasionally cancel egg collection in this case.
- Once eggs have been collected there is no guarantee that they will all be suitable to freeze. Only mature eggs can be frozen

If you have unfortunately failed to reach the point of egg collection or do not have any suitable eggs for freezing, then we will arrange for a follow-up consultation to discuss what options to consider from here.

The team at LCRH wish you every success with your treatment.