Cotswold Fertility Unit

NHS
Gloucestershire Hospitals
NHS Foundation Trust

Patient Information

Female fertility preservation

Introduction

This leaflet has been written for women who are about to start cancer treatment. You may not be thinking of children right now, but might do in the future. If your treatment is likely to affect your chances of having children, you might want to think about fertility preservation (maintaining your ability to conceive a child).

Outlined in this leaflet are brief details about the different procedures for fertility preservation that your doctor (treating physician or nurse specialist) will discuss with you before you make a decision. It might be overwhelming at present, along with the multiple hospital visits, but it is important that you think about it now.

If you decide to go ahead with fertility preservation, it must be done before you start your cancer treatment.

What treatments affect fertility?

- **Many chemotherapy drugs used in the treatment of cancer**
  To what extent these drugs affect your ability to conceive depends on the particular drugs and doses given. Depending on your age, ovarian function may return to normal when the treatment finishes and it may then be possible to have children.
- **Radiotherapy**
  Radiotherapy to certain parts of the body, particularly if your pelvis is being treated, can damage the ovaries. It can also affect the womb (uterus), which can make it difficult to carry a pregnancy successfully.

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Fertility preservation treatments

There are different ways of preserving fertility such as collecting and storing eggs (cryopreservation), embryos or ovarian tissue which can be used to assist in the future, when you are ready to have children.

- **Egg freezing:** This uses a process known as IVF (In Vitro Fertilisation). The procedure involves stimulating your ovaries by giving hormone injections over several days to produce more eggs. The eggs are then collected and stored for future use. This is now a well-established method, but takes time to complete the process. On rare occasions it may not be suitable for hormone-related tumours.
- **Embryo freezing:** The procedure is the same as IVF, but the eggs are then fertilised with the sperm in the laboratory to create an embryo before freezing. This requires sperm from the female's partner or donor sperm, so it is important to think through that the embryos are then the joint property of the man and woman. This is the most successful procedure for fertility preservation.
- **Ovarian tissue freezing:** Using key hole surgery, while you are under general anaesthesia, this method involves the surgical removal of part of an ovary or an entire ovary. The ovarian tissue which contains immature eggs is frozen for future use, then replaced back in the body when needed. This does not involve stimulation of the ovaries so the process may be quicker than other methods. However, this procedure is in its early stages of development, and while a small number of babies have been born worldwide using this method, it is unclear how likely it is to be successful. Ovarian tissue freezing may not be suitable for women who have ovarian cancer or when there might be cancer cells in the ovary. You will also need to be referred to a specialist centre for this treatment.
- **Ovarian suppression/down regulation:** This involves monthly injections throughout chemotherapy treatment to temporarily shut down ovarian function. There is some evidence that this might protect the ovaries from the chemotherapy but it is not suitable for females having radiotherapy.

- **Ovarian shielding (oophoropexy):** This is a surgical procedure involving moving and shielding the ovaries from the radiotherapy field. It is suitable for women having abdominal or pelvic radiotherapy.

Some of these procedures may involve frequent hospital visits for several weeks for blood tests and transvaginal scans. The scans involve the insertion, into your vagina, of a probe similar to a tampon that will allow us to see your ovaries and womb clearly. Your fertility specialist or nurse will be able to give you more information about this procedure.

Other information

All women requesting NHS-funded fertility preservation: As per the Gloucestershire Integrated Care Board policy for preservation, egg and embryo freezing are the only techniques available. All women must meet the current criteria for fertility treatment. This includes being under 40 years of age at the time of treatment, a body mass index of under or equal to 35 and no living children of your own or of your partner.

Where the patient's partner has living children, the patient will only be offered cryopreservation of their own gametes (egg cells) provided they have not had any previous sterilisation procedures.

What happens now?

Once the cancer diagnosis is made and you decide to go ahead with fertility preservation or are unsure about it, you will be referred urgently to the fertility specialist for counselling. The fertility specialist will provide you with details of the options available to you. You will have the opportunity to ask any questions you may have.

Your fertility preservation treatment will begin once a final decision has been made.

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Contraception

There is no way of knowing for certain how or even if your fertility might be affected. However, it is best to avoid any chance of becoming pregnant during your cancer treatment and at least for up to a year (or longer) after your treatment finishes, depending on your oncologist's advice. So, it is important to practice safe sex and to consider contraception that is suitable to your diagnosis.

Confidentiality

All fertility treatments are confidential. This means that staff will not tell anyone what has been said or decided at your appointment. Results of any tests will only be shared with you and your oncologist.

You can find out more about how we look after your information and your rights in our patient privacy notice at www.gloshospitals.nhs.uk/privacy-notice/

About this information

The information in this leaflet is a guide and does not replace professional medical advice relevant to your own personal situation.

Contact information

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Glossary of terms

Chemotherapy: The use of anti-cancer drugs to destroy cancer cells

Cryopreservation: The process of freezing and storing tissue or cells

Embryo: A fertilized egg

Egg: The female reproductive cell

Oncologist: A doctor who specialises in treating cancer

Radiotherapy: The use of high energy X-rays or radiation to destroy cancer cells

Acknowledgement

This leaflet was produced by Mrs Kalpana Reddy, Medical Director of Cotswold Fertility Unit, GHNHSFT

Please visit www.cotswoldfertilityunit.co.uk for further information.

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