
Fertility Preservation in Haematology Patients Undergoing Treatment

Treatment of blood cancer involves several therapies including chemotherapy that may put you at risk of infertility.

While chemotherapy is a highly effective treatment for destroying cancer cells, it may also destroy the testicular cells that produce sperm in men and ovarian cells that produce eggs in women. Hence, both men and women may develop temporary or permanent infertility due to chemotherapy.

Our doctors can discuss if you are risk of infertility and options available to preserve your fertility.

What are the options for fertility preservation for women?

Fertility treatment for women may take about 2 to 3 weeks from the beginning of a woman's menstrual period. If you choose to undergo fertility preservation, your cancer treatment may be delayed for this period of time. Our doctors will advise you on the risks of delaying treatment, and the options available for interim treatment if you choose to preserve your fertility.

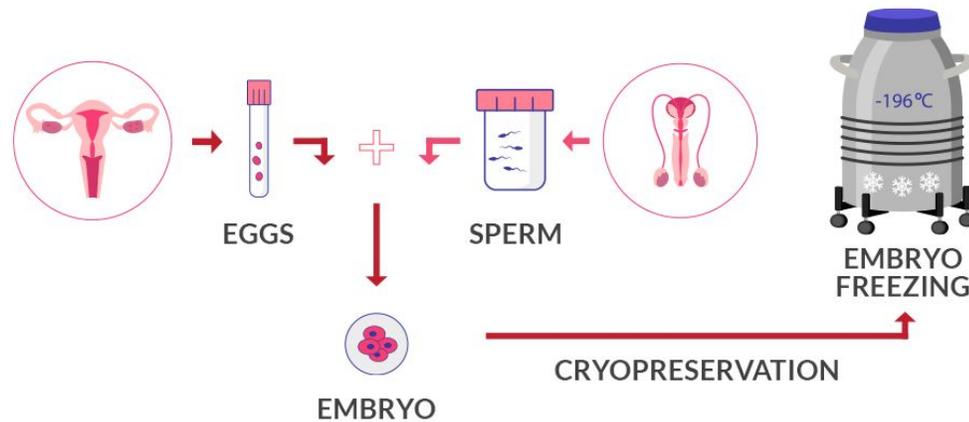
The options for fertility preservation for women include:

- **In-vitro fertilisation (IVF) and embryo freezing**

This option is usually recommended for women who are in a stable relationship. IVF involves causing stimulation of the ovaries by giving hormonal injections to increase the number of eggs produced in the ovaries. The eggs can later be recovered by a procedure.

The eggs are mixed with the sperm of your partner in a laboratory to induce fertilisation. The fertilised eggs, also called embryos, are frozen and can be stored for up to 10 years.

The embryos can be thawed and replaced into your womb after you have recovered from cancer and are ready to start a family.



- **Freezing of eggs (oocytes)**

This method of fertility preservation is suitable for younger females of childbearing age without a steady partner. The eggs are recovered from the ovaries and stored without being fertilised.

The eggs can be thawed and mixed with the sperm of your partner to create embryos when you are ready to try for a baby.

- **Ovarian tissue cryopreservation**

This method of fertility preservation involves the removal of a small sample of ovarian tissue.

In this procedure which is performed under general anaesthesia, a laparoscope is inserted into the pelvis to remove the tissue. The tissue is then frozen and stored in a laboratory under controlled conditions.

After recovery from cancer therapy, the tissues can be transplanted back into the body to restore fertility.

- **Hormonal therapy**

If you are undergoing chemotherapy or radiotherapy, your ovaries can be temporarily switched off to protect them by undergoing hormonal treatment. This can be done by giving hormonal injections once every four weeks during chemotherapy. Your periods are likely to stop during this time, and you may experience symptoms of menopause including hot flushes and night sweats.

What are the options for fertility preservation for men?

Men can choose to preserve their fertility before cancer treatment via sperm banking.

- **Sperm Banking**

Sperm banking refers to the method of collecting and storing sperm. The banked sperm can be used later to father a baby through fertility treatments such as IVF.

Some chemotherapy treatments can affect the number of sperm produced or reduce the ability of sperm to fertilise an egg. These effects can be temporary or permanent depending on the drug, the strength of the medication, and your age. Our doctors can discuss the risk of infertility with you, and you can then decide if you would like to proceed with sperm banking.

- **What happens during sperm banking?**

You will be referred to a fertility clinic where you will need to produce a sample of semen which will be analysed and frozen in liquid nitrogen. You may need to provide several samples of semen over a few weeks.

The sperm obtained from the semen can be stored for several years.

If your fertility is not restored after cancer treatment, the frozen sperm can be transferred to an IVF clinic where they can be used to inseminate your partner.

- **What are the possible risks involved in sperm banking?**

Sperm banking is a safe procedure. However, if your disease is aggressive, chemotherapy may need to be started urgently and sometimes there may not be enough time to bank your sperm, or only one sample can be stored.

How to cope with infertility post-treatment?

Chemotherapy drugs used for treating cancer may cause permanent or temporary infertility in men and women. It may take a few months to years after recovery for your fertility to be restored to normal.

The uncertainty about your fertility may cause immense anxiety and stress. Discussing your concerns and options with your doctor or a fertility specialist can help ease the stress. It will also allow you to make informed decisions about the future.

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