Cryopreservation of Oocytes, embryos and Sperm for patients at risk of permanent infertility

For patients undergoing treatment with significant risk of permanent infertility, NHS NWL CCGs will fund the collection, cryopreservation and storage of oocytes, embryos and sperm.

Storage will be for 5 years.

Subsequent use and re-implantation will be subject to meeting the standard criteria set out in the NWL IVF policy at the time of the request of re-implantation.

In women over the age of 40, who meet the rest of the IVF criteria, the funding of re-implantation will be left up to the discretion of the fertility consultant.

Note

This policy does not relate to the storage of gametes in NHS NWL funded IVF cycles. Please see separate IVF policy

These polices have been approved by the eight Clinical Commissioning Groups in North West London (NHS Brent CCG, NHS Central London CCG, NHS Ealing CCG, NHS Hammersmith and Fulham CCG, NHS Harrow CCG, NHS Hillingdon CCG, NHS Hounslow CCG and NHS West London CCG).
Cryopreservation

Fertility cryopreservation refers to the preservation of fertility by means of freezing embryos, ovarian tissue or oocytes in order to subsequently re-implant them. It is normally applied for patients who are undergoing treatment likely to cause significant risk of permanent infertility or, outside of a clinical context, for social reasons.

The use of frozen eggs in treatment is a relatively new development. Very few babies have been born in the UK after treatment using patients’ own frozen eggs (although more have been born from donor eggs). However, vitrification (a new method for egg storage) has recently been shown to improve the chance of eggs surviving the freeze-thaw process and therefore increase the success rate.

To help boost egg production, fertility drugs are used to stimulate the ovaries to produce follicles (which contain the eggs). The developing follicles are monitored and when they are large enough, they are carefully emptied to collect the eggs that they have produced. They are collected while the patient is under sedation or general anaesthetic. To freeze the eggs, they are placed in storage in liquid nitrogen. (HFEA)

Whilst cancer patients are the primary target group of this policy, in order to avoid discriminating against other groups undergoing treatment whose fertility is also affected, it includes all patients undergoing treatment with significant risk of permanent infertility.

The treatment of cancer frequently involves the use of radiotherapy and/or chemotherapy. Both of these treatments can have serious adverse effects, both immediate and delayed.

One of the side-effects of such cancer treatment is its impact on fertility, either by direct injury to the ovaries or testes from radiotherapy or via systemically administered chemotherapeutic agents. The marked success in the treatment of certain cancers affecting younger people and the associated improved survival for an increasing number of affected people means that consideration of the potential impact of the cancer treatment on fertility is one of the issues that should be discussed before that treatment is started. In some cases the individual’s fertility will return after the cancer treatment is completed but in other cases fertility never returns, or is severely impaired.

Since the publication of the 2004 version of the NICE guideline (CG156), it has become increasingly common for commissioners of NHS-funded healthcare to procure services that offer an opportunity to affected individuals to preserve their fertility prior to the start of cancer treatment.

Preservation of fertility involves some form of freezing, technically called cryopreservation. The methods used in clinical practice at the time of this guideline update involve cryopreservation of semen, oocytes and embryos. Cryopreservation of ovarian and testicular tissue is largely undertaken in a research setting.

References:

- NICE Guidance CG156 - Fertility: Assessment and treatment for people with fertility problems
  https://www.nice.org.uk/guidance/cg156