

Ovarian (Egg) Reserve



Information for Patients and Partners



What is ovarian reserve?

Ovarian reserve is a term used to indicate the number of remaining oocytes (eggs) in the ovary. The ovary is generally thought of as an egg bank from which the woman draws during her reproductive life. While each month one egg is released by ovulation about one thousand additional eggs are lost through a natural process of cell death (atresia). Thus, with advanced maternal age the number of eggs that can be successfully recruited for a possible pregnancy declines. That's why the woman's age is the most important factor in determining the chance of conception, whether naturally or after assisted reproductive techniques.

Why it is important to check for ovarian reserve?

The rising trend towards delayed motherhood results in a greater number of women seeking fertility treatment at an older age. Although the woman's age is a very important factor affecting ovarian reserve there are a number of other factors that can have an effect on ovarian reserve such as genetic and environmental factors. For instance, smoking is known to adversely affect ovarian reserve. Some women may have a very low ovarian reserve at young age due to a genetic, autoimmune or even unknown cause. It is very important to check the ovarian reserve for all women seeking fertility treatment. The result of ovarian reserve tests will determine whether or not you may benefit from the treatment offered to you and may also determine the likelihood of the treatment success. Some women who wish to delay childbearing may also benefit from undergoing a test to check their ovarian reserve for their own reassurance.

How would ovarian reserve affect my chances to have a baby?

Women with reduced ovarian reserve may continue to have regular menstrual cycles for a variable period of time but may also present with irregular periods or delayed menstruation. Women with regular periods and reduced ovarian reserve are probably ovulating. This means that

their ovary is releasing an egg every month which could potentially result in a natural pregnancy.

The principle of in vitro fertilization (IVF) is to stimulate the ovary with fertility drugs to enable the growth of many eggs which could then be fertilized outside the woman's body (in the laboratory) leading to the development of a number of embryos. One or two embryos are transferred into the woman's uterus and the remaining embryos can be frozen for future use by the couples. Women with reduced ovarian reserve don't usually respond well to ovarian stimulation. Many of those women will only produce one or two eggs despite been given the maximum dose of fertility drugs in IVF treatment. Therefore, IVF using the woman's own eggs is not the right treatment for women with reduced ovarian reserve and it will be as good as trying naturally. If natural conception is not possible because of other reasons such as damaged tubes or low sperm count, then egg donation will be the best realistic option for those women with reduced ovarian reserve.

How can we check for ovarian reserve?

There are a number of tests that are currently available to check for ovarian reserve. The tests that commonly used in practice are:

1. **Serum FSH on day 2-4 of the period.** This is a blood test performed on day 2-4 of menstruation. It can be used as a screening test but is not very reliable as it is subject to cycle-to-cycle fluctuation. An FSH higher than 9 IU/L usually indicates reduced ovarian reserve. We do not offer IVF treatment (using the woman's own eggs) for women with FSH higher than 15 IU/L.
2. **Antral follicle count (AFC).** Using a vaginal probe, an ultrasound scan can be performed to count the number of small follicles in both ovaries measuring 2-6 mm in diameter. AFC less than 5 indicates reduced ovarian reserve.
3. **Serum AMH.** This is a blood test that can be performed at any time during the cycle and has been found to be more reliable than FSH in predicting ovarian reserve and ovarian response to fertility drugs. AMH lower than 5.5 usually indicates low ovarian reserve.

Our commitment to patients

We are constantly striving to improve our services to patients, and we will welcome your comments or suggestions for improvement.

Leicester Fertility Centre Contact Details

Tel: 0116 2585922
E-mail: LFCinfo@uhl-tr.nhs.uk
Website: www.leicesterfertilitycentre.org.uk

Useful addresses

Human Fertilisation and Embryology Authority: www.hfea.gov.uk
NICE guidelines: www.nice.org.uk
NHS - Response line: 111.nhs.uk / 111
NHS - Smoking helpline: 0300 123 1044
Fertility Network UK: www.fertilitynetworkuk.org / 0121 323 5025

Do you feel that you are at risk of verbal or physical abuse? If so, you may find the following numbers useful:

Domestic Violence Helpline:

United against violence & abuse (UAVA)

Helpline: 0808 802 0028

Email: info@uava.org.uk

Text support: 07715 994 962



This information was correct at the time of printing. While the Trust makes every reasonable effort to keep its information leaflets up to date, very recent changes may not be reflected in the guidance and you should discuss this with the clinical staff at the time of your appointment.



Today's research is tomorrow's care

We all benefit from research. Leicester's Hospitals is a research active Trust so you may find that research is happening when you visit the hospital or your clinic.

If you are interested in finding out how you can become involved in a clinical trial or to find out more about taking part in research, please speak to your clinician or GP.

If you need information in a different language or format, please call the number(s) below or email equality@uhl-tr.nhs.uk

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔

على هذه المعلومات بلغة أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل
જો તમને અન્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਹੇਠਾਂ ਦਿੱਤੇ ਸਾਢੇ ਨੰਬਰ 'ਤੇ ਟੈਲੀਫੋਨ ਕਰੋ।

Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

0116 258 4382 or 0116 250 2959