

done any time in the menstrual cycle. An AMH test can pick up who might lose their fertility more quickly. It does not show who is more fertile than average, neither does it predict ovarian reserve in women older than 40 or those with Polycystic Ovary Syndrome (PCOS).

Follicle Stimulating Hormone (FSH) test

Until the advent of AMH (see above) doctors used FSH to estimate ovarian reserve. While AMH is more predictive than FSH in women under 40, FSH is still useful in older woman and in women nearing menopause.

Semen analysis

The semen analysis gives an estimate of the quantity of sperm being produced as well as investigating sperm motility (movement) and morphology (shape). This information provides some degree of predictability about the ability of sperm to fertilise eggs. The number of sperm in the ejaculate of fertile men covers a wide range and there can be significant fluctuations from day to day, so that several semen analyses may be necessary to gain an accurate indication of fertility. The number of days abstinence before ejaculation also influences the number of sperm, so a period of 2 to 4 days is recommended before testing. Fertility Associates also offers DNA fragmentation testing to assess sperm health, because higher levels of DNA fragmentation have been associated with a lower probability of a live birth.

Questions that patients frequently ask

When should I do something?

The right time to seek help is when you are concerned. Often simple tests to check ovulation and sperm quality will give you some clarity on next steps. General guidelines are that you should refer to a fertility specialist if you have been trying to conceive for 12 months without success and the woman is under 35, and earlier if the woman is 35 or older.

Does my age matter?

Yes! A woman's chance of becoming pregnant decreases with age, especially in the late 30s. Generally, the older you are, the earlier you should seek help.

Who should I see?

Your GP may assist with initial tests and refer you for further fertility investigations and treatment. Alternatively, you can telephone us for a consultation with a fertility specialist at any stage.

What happens when I see a fertility specialist?

Your fertility specialist will investigate all possible causes of infertility. This investigation will likely include a medical history and physical examination – hormone tests for women (including ovarian reserve) and sperm tests for men. We offer a full range of treatments. Your specialist will take you through all of the options and outline the best one for you. We also offer counselling and support



services to help you throughout your time with us.

How successful is treatment?

Recent advances in technology means that the chance of having a child through IVF is 40-50 percent per treatment for women aged 35 years or younger. Many people will have the option of lower technology treatments which also offer a good chance of pregnancy over a course of three to four months.

Does the Government pay for treatment?

You may be eligible for a publicly funded consultation but you do need to be referred by your GP for this. At the first consultation, whether public or private, you can be scored to find out if you are eligible for publicly funded treatment. There is a waiting list for publicly funded consultations, and a significant waiting list for publicly funded treatments.

0910

Fertility Associates' treatment and service overview



Starting a family is one of the biggest decisions people make in life, yet having a baby is not always easy.

As New Zealand's leading provider of fertility diagnosis, support and treatment, Fertility Associates are dedicated to giving people the best possible chance of having a baby. We've been busy building families for over 20 years with more than 10,000 babies born so far.

Committed to excellence, each Fertility Associates clinic has a close-knit team of doctors, nurses, counsellors and scientists. We offer both private and publicly funded consultation and treatment.

If people have fertility questions that remain unanswered, the sooner they talk to us the better their chance of success.

We are located in Auckland, North Shore, Hamilton and Wellington and also hold regular clinics in other major North Island centres and Nelson. To contact one of our clinics please call 0800 10 28 28 or visit us online at www.fertilityassociates.co.nz

Contact us: www.fertilityassociates.co.nz • Phone 0800 10 28 28

• **Auckland** Level 3, 7 Ellerslie Racecourse Drive, Remuera
Private Bag 28910, Remuera, Auckland 1541
P 09 520 9520
F 09 520 9521
E faa@fertilityassociates.co.nz

• **North Shore** Level 1, Suite 107, 119 Apollo Drive, Albany
Private Bag 28910, Remuera, Auckland 1541
P 09 475 0310
F 09 476 7980
E fas@fertilityassociates.co.nz

• **Hamilton** Level 2, 62 Tristram Street, Hamilton
PO Box 598, Hamilton 3240
P 07 839 2603
F 07 839 2604
E fah@fertilityassociates.co.nz

• **Wellington** Level 2, 205 Victoria Street, Te Aro
PO Box 11048, Manners Street, Wellington 6011
P 04 384 8401
F 04 384 8402
E faw@fertilityassociates.co.nz

We also hold clinics in Whangarei, East Auckland, West Auckland, Tauranga, Rotorua, Gisborne, Hawkes Bay, Palmerston North, Lower Hutt and Nelson. Please call us or check our website for further details.



FERTILITY associates | a better understanding
TE RAUHANGA O TE WHARETANGATA

Fertility Associates' Treatments and Services

Ovulation induction (OI)

Ovulation induction is a drug treatment to induce ovulation in women with irregular or absent menstrual cycles. It involves taking pills or giving drugs as injections under the skin. It involves blood tests and ultrasound scans to monitor progress, to time intercourse and to reduce the chance of multiple pregnancy. Usually the couple has intercourse when ovulation is predicted or triggered.

Intrauterine insemination (IUI)

IUI (or artificial insemination) can be used to treat couples who have any of the following:

- Unexplained infertility
- Mild endometriosis
- Mild sperm factor
- Inability of the sperm to survive in the cervical mucus.

The ovaries are mildly stimulated with drugs to produce 2 or 3 eggs. At the time of ovulation the sperm is washed and the most active sperm are inseminated into the uterus through the cervix.

In vitro fertilisation (IVF)

There are a number of steps in IVF treatment. The first is the use of hormonal drugs to increase the number of eggs developing in the cycle from one to around 5-15. Progress is monitored by blood tests and ultrasound scans. Maturation of the eggs is triggered by another drug and the eggs are withdrawn from the ovary using a needle guided by ultrasound. The eggs are fertilised with the sperm in the laboratory and cultured under careful and controlled conditions. Fertilisation is checked

the day after adding the sperm and usually one embryo is transferred into the uterus 3-5 days later.

Sometimes embryos are transferred into the uterus on the third day after fertilisation. However, culturing embryos for five days until they are blastocysts is becoming increasingly common. This procedure, known as blastocyst culture, allows better selection of embryos for transfer.

Intracytoplasmic sperm injection (ICSI)

ICSI is a variation of IVF where instead of the sperm and eggs being mixed in a test tube, a single sperm is injected into each mature egg. ICSI is used when sperm quality is too poor for conventional IVF to work. ICSI allows almost any man with sperm – either in his semen or in his testes, to try IVF.

Embryo freezing

Often, more than one or two embryos are produced in an IVF cycle – good quality additional embryos can be frozen, and later thawed to give another chance of pregnancy. Freezing and thawing are done under special conditions – about 60-70% of embryos survive the process. The woman's menstrual cycle is monitored with blood tests to make sure the embryos are thawed and replaced at the right time of the menstrual cycle.

Assisted hatching

This is an option in IVF or ICSI. A small hole is made in the soft shell of the embryo before it is replaced in the uterus. There is some evidence that assisted hatching can improve

pregnancy rates in some groups of IVF patients, mainly those who are older or who have had several IVF cycles without success.

Pre-implantation genetic diagnosis (PGD)

PGD involves taking one or more cells from embryos to test the cells for genetic disorders or for the number of chromosomes present. It requires IVF to provide the embryos for testing. After testing, embryos may then be transferred to the woman's uterus to achieve pregnancy.

Conditions currently tested for include Haemophilia, Cystic Fibrosis, β -Thalassaemia, Huntington's disease, Fragile-x, Spinocerebellar Ataxia 3 and 7, and Myotonic Dystrophy.

Donor insemination (DI)

Sperm from a donor is inseminated close to the time of ovulation. The time of ovulation can be identified from blood tests.

Traditionally DI has been used when a man has few sperm or poor quality sperm. Rarely it is used if the man's sperm carries a very high risk that any child might have a serious congenital abnormality. It is also an option for single women or women in a same-sex relationship.

At Fertility Associates people select the donor they want to use. All donors are required to be identifiable to children later in life and are carefully screened. The ideal sperm donor is a healthy male aged 20 – 45 years from all walks of life. He needs to have considered the implications for himself and his own family. Sperm can be donated from a patient-recruited or clinic-recruited donor.

Donor egg (DO)

Donor eggs can be used for women with premature menopause, women who have not become pregnant after many IVF cycles, and women who no longer have viable eggs of their own because of their age. An altruistic donor (sometimes a friend or family member) starts an IVF cycle to provide the eggs and the woman's partner provides the sperm. The recipient of the embryos receives hormonal treatment so that her uterus is synchronised with the embryos' development.

Surgical sperm recovery – MESA, PESA, TESA and TESE

These are acronyms for various techniques to obtain sperm from the testes or epididymis to use in ICSI. These procedures are usually done under local anaesthetic, and extra sperm can be frozen for future use.

Microsurgery

Women can sometimes have microsurgery to repair damage to the Fallopian tubes and men to correct abnormalities in the vas deferens. The surgery is called 'micro' because the surgeon uses a microscope to undertake the fine work. Microsurgery can often be used to reverse male and female sterilisation.

Long term storage of sperm

Sperm can be frozen before cancer treatment or vasectomy for possible use in the future.

Egg freezing

Egg freezing is a form of fertility preservation for women about to undergo cancer treatment or for other

women who have concerns about their ability to conceive longer term. The eggs are collected as for any IVF cycle and then frozen. When the woman wishes to use the eggs, they are thawed, the sperm is injected into the eggs (ICSI) and the resulting embryos are placed in the uterus. Egg freezing may also be an option for couples with religious, moral or ethical objections to creating embryos that won't be used immediately.

Ovarian and testicular tissue freezing and storage

Ovarian and testicular tissue can be frozen and stored before surgery or cancer treatment.

To date, some babies have been born following the storage, thawing and fertilisation with the eggs or sperm that come from these pieces of tissue. This technique is used to help women and men at risk of losing their fertility due to radiotherapy or chemotherapy as treatment for cancer.

Donor embryo

Some people, having undergone successful IVF treatment and completed their families, may still have frozen embryos. They will need to make a decision about what to do with their remaining embryos. One option is to donate them to people for whom this may be the only option of experiencing parenthood. Each application for donating embryos needs to be approved by the Ethics Committee on Assisted Reproductive Technology, and Fertility Associates can assist with this process.

Surrogacy through IVF

Surrogacy is the term used when a woman bears a child for another

woman. It is used in cases when a woman cannot carry a baby herself because her uterus is absent or malformed or when a medical condition exists making the pregnancy a threat to her and/or her baby's health.

IVF technology allows the collection of eggs from the biological mother, fertilising them with sperm from her partner and transferring the resulting embryos to another woman who will carry the pregnancy, give birth and give the baby to the parents to be.

Each application for surrogacy needs to be approved by the Ethics Committee on Assisted Reproductive Technology, and Fertility Associates can assist with this process.

Counselling

At Fertility Associates we understand the major impact and distress infertility can cause. Our counsellors are available to help with:

- Coping strategies
- Decision-making strategies
- Information about infertility and emotional responses
- Support during and following treatment
- Relaxation techniques
- Other difficulties that may arise because of infertility
- Pregnancy loss
- Conception involving donor eggs, sperm or embryos, and also surrogacy.

Anti-Mullerian Hormone (AMH) test

AMH is a hormone made by small follicles as they grow in the ovaries. This test is a convenient and cost effective blood test and can be