



GYNAECOLOGY AND FERTILITY CENTRE

INFORMATION SHEET

In vitro fertilisation (IVF)

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In vitro fertilisation (IVF)

This leaflet is designed to help you understand more about your IVF treatment at the Agora Clinic, the licensed centre where your scans, blood tests, egg collection and embryo transfer will take place. All treatment cycles will be coordinated by our fertility nurse specialists who are there to help you and answer any questions you may have (see below for contact details).

What is IVF?

In vitro fertilisation literally means 'fertilisation in a glass' and has resulted in the birth of many 'test tube babies'. During the procedure, which is carried out in our on-site laboratory, eggs which have been removed from the ovaries are fertilised with sperm in a specially designed incubator, and then grown in the laboratory for two, three or five days before being placed back in the womb.

ICSI is a special form of IVF in which individual sperm are injected into the egg under microscopic vision (see separate information sheet). This is the treatment advised for couples when sperm quantity or quality is very poor.

Who can benefit from IVF?

IVF is recommended if:

- You have blocked, damaged or absent fallopian tubes
- There are sperm abnormalities
- There is anovulation (failure of the ovary to release an egg) which has not responded to conventional ovulation induction techniques
- You have not become pregnant using medication or other techniques such as IUI
- You have unexplained infertility

Screening

It is a requirement of the Human Fertilisation and Embryology Authority (HFEA) that both partners are screened for HIV, hepatitis B and C. These tests must be completed within three months of starting treatment and then every two years after that.

The results of the tests will be given to you at one of your appointments. If any of them are positive, we will offer you or your partner an appointment to discuss the result and make arrangements to refer you or your partner to a specialist clinic. If, after counselling and appropriate medical management, you still wish to have fertility treatment, we will then plan your treatment taking into account the extra precautions needed to protect your partner and future child from any risk of acquiring these infections.

Before treatment begins

Before you start your treatment cycle, please make sure you have been advised about:

- The limitations and possible outcomes of the proposed treatment
- The possible side-effects and risks of the treatment
- Alternative treatments
- The techniques involved
- The possible disruption to your life
- The availability of counselling
- The clinic's duty to consider the welfare of any child resulting from treatment with us
- Details of the HFEA
- Costs

What is involved for women?

There are a number of different treatment methods used in IVF and, having carried out your initial fertility screen, your consultant will be able to advise which one is best suited to you. However, all IVF cycles at the Agora Clinic involve the need to have hormone injections to boost the production of eggs and prevent natural ovulation. The eggs are then collected and fertilised using either your partner's or donor sperm – the five main steps are set out below. Your consultant will be able to discuss the details of your treatment with you and answer any questions you may have.

1. Preventing natural ovulation

The first step in IVF treatment is having medication that stops your normal menstrual cycle. This usually involves injecting yourself every day for around 14 days, or using a nasal spray.

2. Boosting egg production

Once your menstrual cycle has been prevented, the next step is to inject a fertility hormone known as follicle stimulating hormone (FSH) daily for about 12 days. This boosts egg production, which means there will be more embryos to choose from to implant in the womb. During this time, you will have regular appointments at the Agora Clinic to check your progress using transvaginal ultrasound scans and blood tests. You will also be given medication to help your eggs to mature around 35-38 hours before they are collected.

3. Egg collection

In most cases, egg collection is carried out at the Agora Clinic under light intravenous sedation rather than a general anaesthetic. It is highly effective in controlling pain and anxiety and is safer than anaesthesia. You will be sleepy and comfortable throughout the procedure and recover very quickly. You will be able to go home around two hours later but must have a responsible adult to accompany you.

In some cases the procedure will need to be carried out at the Lister Fertility Clinic in Chelsea (which involves an additional charge). This may be because you:

- Need (or prefer to have) a general anaesthetic
- Have a serious medical condition or are overweight with a body mass index (BMI) more than 35
- Are on the Pre-genetic Screening (PGS) programme
- It is not possible to reach the ovary with a vaginal probe, so you need to have abdominal scanning or a laparoscopic method of egg collection

At the Agora Clinic, you will be given medication (pessaries, injections or gel) to prepare the womb lining for the embryo to implant (attach). Eggs are normally collected using a fine needle under ultrasound guidance while you are sedated (there is more information in our Egg Collection patient leaflet). You may experience some cramping and/or light bleeding afterwards. Once identified, the eggs are put in a dish clearly labelled with your name and Agora clinic number and placed in an incubator to keep warm.

4. Fertilisation

Next, the eggs are fertilised using either your partner's or donor's sperm. They are developed in our on-site laboratory for up to 20 hours before being checked; we would normally expect that about 70% of the eggs will fertilise. On the morning after egg collection the embryologist will examine the eggs to see which ones have been fertilised and call you to let you know the outcome.

The fertilised embryos are kept in our incubator for a few more days, after which the best ones are selected for transfer. These embryos are then transferred back to the womb two to three days after the egg collection.

Occasionally, none of the eggs will fertilise. We understand that this can be extremely upsetting and will arrange for you to see your consultant as soon as possible if this is the case to decide on the next steps.

5. Embryo transfer

Embryo transfer is a simple procedure that should be pain free and similar to having a smear test. It only takes a few minutes and you can go home immediately afterwards.

- Embryo transfer is performed under ultrasound guidance so you will need to have a full bladder to enable a clearer image to be seen
- The embryologist will first discuss the number and grade of your embryos with you and which one or two are to be transferred
- Under recent HFEA guidelines we will only put three embryos back in exceptional circumstances in women over 40 years of age

Multiple pregnancies

Even when only two embryos are transferred there is a significant risk of twins (up to 20%). These multiple pregnancies are associated with an increased risk of premature delivery and cerebral palsy, as well as most of the complications of pregnancy itself such as diabetes and high blood pressure. In addition, once they are born, bringing up twins or triplets has financial, emotional and physical implications for the parents. By adopting a strict policy on the number of embryos transferred, we aim to keep multiple pregnancies to a minimum. We offer embryo freezing and frozen embryo transfer (see the separate patient leaflets for more information) so that you can store embryos that are not implanted for future IVF treatments.

Can I carry on with my normal activities?

The embryos are quite safe within the womb and you can walk about, bathe, shower and carry on with your normal daily activities. It is best to avoid strenuous exercise until your abdomen feels less tender and back to normal. Sexual intercourse can be resumed whenever you feel like it.

What happens next?

Two weeks after your egg collection, you should do a home pregnancy test or you may choose to come to the clinic for a blood test. If the test result is positive we will arrange for you to come in for an early pregnancy scan three weeks later (you will be seven weeks pregnant at this stage). If the test result is negative you can stop the progesterone pessaries and should come for a follow-up consultation with one of the consultants.

What is involved for men?

Before your partner has IVF, we will carry out a number of tests including checking the number and quality of your sperm.

If you are able to provide sperm without medical intervention, you will be asked to produce fresh sperm on the morning of your partner's egg collection. We advise two to three days (no more) abstinence from sexual intercourse or masturbation beforehand. We usually advise that the sample should be produced at the clinic; a private room is designated for this purpose in a quiet area. If you anticipate any difficulty with this, please let us know in plenty of time before the day of egg collection as it may be advisable to freeze a sample of sperm as a backup. If the sample is poor on the day of collection, we may ask for a second sample. The sample is then processed in the laboratory to separate the healthy fast swimming sperm from the fluid.

In some cases, where there is a low sperm count or the tubes within the testicles are blocked, damaged, or absent, surgical sperm retrieval (SSR) can be carried out. There are two methods for doing this and both are carried out under a light general anaesthetic with an additional local anaesthetic to reduce pain after surgery:

- PESA (percutaneous epididymal sperm aspiration) – sperm are collected from the epididymis where they are stored after they have been made in the testes, using a fine needle
- TESE (testicular sperm extraction) – a biopsy is taken from the testicular tissue in order to remove some sperm. This involves making a small cut in the scrotum

There is more information about SSR in our separate patient leaflet.

What are the risks of IVF treatment?

- Multiple births: this is the biggest health risk associated with IVF treatment and is the reason why the HFEA restrict the number of embryos that can be transferred into the womb
- Medication levels: we plan your medication levels based on your individual needs, age, hormone levels, BMI and the condition of your ovaries. However, in around 5-10% of patients, the initial dose of drugs given to stimulate the ovaries can be either too high or low, in which case the cycle has to be abandoned and medication levels adjusted
- Ovarian Hyperstimulation Syndrome (OHSS): OHSS is a potentially dangerous over-reaction to taking the fertility medication used to stimulate egg production. It occurs in about 1% of women on IVF treatment despite all possible precautions being taken. OHSS normally occurs during the week after egg retrieval; cysts develop on the ovaries and there is fluid in the abdomen. The risk is higher if conception occurs, as symptoms are triggered by the pregnancy hormone. Symptoms include:
 - A swollen abdomen and stomach pains
 - Nausea, shortness of breath, faintness, and reduced urine
 - Dehydration
 - Abdominal bloating and associated discomfort

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Provided OHSS is diagnosed early and managed correctly, symptoms resolve straight away with very little medical intervention. Occasionally, intravenous fluids and anti-sickness drugs are needed, and in rare cases the excess fluid around the ovaries needs to be drained. If you are worried you may have symptoms of OHSS, it is important to contact the nurses at the Agora Clinic as soon as possible

- Ectopic pregnancy: the chances of an embryo implanting outside the womb appear to be higher in women who are having IVF treatment, particularly if there are already problems with the fallopian tubes. Symptoms include abdominal pain on one side, along with vaginal bleeding or discharge (see the separate patient information leaflet for more information). If you are worried you may have an ectopic pregnancy, you should contact the clinic straight away during working hours, or visit your local Accident & Emergency Department as soon as possible

Counselling

At the Agora Clinic, we believe that providing counselling is a vital part of the overall service we offer. All patients are offered specialist independent fertility counselling before, during and after treatment. For women or couples who are considering having treatment with donor sperm, it is particularly important to have counselling so that you can explore all the implications, both for you and your child.

Having treatment for fertility problems can cause difficult and often painful emotions for those involved. Being unable to have a child naturally, the fear of never being able to conceive, or a sense of bereavement if you have had a miscarriage, can make you feel that your sense of purpose is being threatened, that your future is on hold, or that you have 'failed'. Relationships sometimes become strained, often because each partner is dealing with the situation differently. Although this is very normal, it can cause people to feel confused and isolated.

The process of counselling enables you, either individually or as a couple, to explore your thoughts, feelings, and beliefs in a safe, non-judgmental space. You may decide to make changes to your life, or come to terms with things that cannot be changed. Often it is easier to make decisions about your situation when you talk to someone who isn't directly involved.

Deborah Sloan is our independent counsellor. She is based in Brighton and you can contact her directly on: 07736 705904 or by email at: deborah@deborahsloancounselling.com to arrange your appointment.

Consent forms

Before starting your treatment cycle you will be asked to read and sign a number of forms (including HFEA consent forms) agreeing to the IVF treatment, medication, the egg collection, and the number of embryos to be transferred or frozen. These will all be discussed at your nurse consultation, but if you have any queries please contact us for more information.

Medication

Any medication needed for treatment will be prescribed at the Agora and delivered to you using our home delivery service. You will be shown how to administer any medication at your nurse consultation, before starting your IVF treatment.

Are there any side-effects from the fertility medication?

All medication has potential side-effects, which will be discussed with you before your treatment. These can include:

- Headaches
- Tiredness
- Mood swings
- Hot flushes
- Nausea
- Nasal irritation
- Discomfort and redness at injection site
- Vaginal bleeding
- Allergy
- Pelvic discomfort

If you are worried that you may be experiencing side-effects, please contact the clinic immediately. There is an emergency number for out-of-hours calls below. In the unlikely event that you are unable to make contact with us, your GP or local Accident & Emergency Department will be able to help.

Contact information

All treatment cycles are coordinated by our fertility nurse specialists. Please contact any one of them if you have any questions or concerns about your treatment.

The Agora Gynaecology and Fertility Centre: 01273 229411

Urgent calls for out-of-hours emergencies: 07912 341857

Or email us at: info@agoraclinic.co.uk

Further information

Infertility Network UK is a charity that offers help, advice, information and support in dealing with many infertility issues:

Infertility Network UK
Charter House
43, St Leonards Road
Bexhill on Sea
TN40 1JA
Tel: 01424 732361
www.infertility.networkuk.com

The medical information in this leaflet is provided as an educational resource only. It is not intended to replace the advice of your GP or medical team and should not be used or relied upon for any diagnostic or treatment purposes. The information has been prepared by Dr Carole Gilling-Smith, Consultant Gynaecologist and Medical Director of the Agora Gynaecology and Fertility Centre. It was last updated in August 2014.