

Fertility treatments

Around one in six couples in the UK experience fertility problems when they fail to fall pregnant after two years of unprotected sex.^{2,5} Infertility is often thought of as being a female problem, but in fact nearly a third of cases are caused by male problems, such as a low sperm count.² Other fertility problems are caused by women not producing eggs regularly enough or damaged or blocked fallopian tubes.¹

For around 23 percent of people, fertility remains unexplained.¹

If you don't get pregnant within 18 months to two years of having regular, unprotected sex, and within six months if you're over 35, then speak to your GP.² Many couples will be reassured that they don't need any treatment – just to have more sex, while others may need help with conception.¹ The good news is that there are many options available.¹

Each year, 30,000 people have fertility treatment, creating 9,000 babies.² In theory, you can choose NHS-funded or private treatment although the reality is that the availability of NHS-funded treatment can still vary across the UK.² The NHS should offer all eligible women, between the ages of 23 and 39, at least one free cycle of IVF. Private treatment costs around £5,000 per cycle.²

Undergoing tests and treatment can be very stressful.³ It may put strain on your relationship, so you should have access to a counsellor before, during and after any treatment.^{2,3}

Fertility drugs and surgery

If you're not producing eggs normally, you'll be offered treatment called ovulation induction to stimulate your ovaries.¹ The type of treatment offered depends on what's causing the problem.¹ Drugs are either given as pills or injections.

Polycystic ovary syndrome (PCOS)

If you have PCOS, you'll probably be offered drugs called clomifene citrate or tamoxifen.¹ Once you start, you should begin to produce eggs, and can take it for up to 12 months.¹

If nothing happens, and you are overweight, you may be offered clomifene citrate and another drug called metformin.¹ This can increase the chance of you ovulating and getting pregnant.¹ Metformin is not licensed for fertility treatment, so your doctor needs to get your consent before prescribing it.¹

Another treatment is an operation called laparoscopic ovarian drilling which can increase the risk of having a multiple pregnancy.¹

The doctor makes small cuts just below your navel to look at your ovaries through a laparoscope – a tiny microscope. ¹ Heat treatment, known as diathermy, is then used to destroy some of the extra follicles. ¹

Alternatively, you may be offered gonadotrophin hormone treatment.

¹Gonadotrophins - follicle-stimulating hormone (FSH) and luteinising hormone (LH) - occur naturally in our bodies. ¹ Gonadotrophin drugs can be made from human sources or artificially from yeast cells. ¹

Other ovulation problems

If you are found to have low levels of gonadotrophin hormones and oestrogen, you may be offered pulsatile gonadotrophin-releasing hormone or gonadotrophins, as they will help you to ovulate. ¹

If you have a disorder called hyperprolactinaemia (a pituitary gland disorder), you may be offered drugs such as bromocriptine. ¹

Blocked fallopian tubes

If you have blocked fallopian tubes you may be offered IVF or if the problem is minor, surgery. ¹

Sometimes, a procedure called selective salpingography with tubal catheterisation or cannulation can help. ¹ The doctor uses a tiny microscope called a hysteroscope to insert a small tube into the fallopian tubes to clear the blockage. ¹

If you have endometriosis, you may be offered an operation known as surgical ablation or resection. ¹ This will remove or destroy the endometriosis and improve your chances of getting pregnant. ¹ If you have mild endometriosis, you may be offered **intra-uterine insemination (IUI)**. ¹

Unexplained fertility problems

If there are no obvious reasons for your fertility problems, you may be offered drug treatment **clomifene citrate** to stimulate your ovaries to produce eggs, or assisted reproduction through **intra-uterine insemination (IUI)** or **in vitro fertilisation (IVF)**. ¹

Intra-uterine insemination (IUI) ¹

IUI is where the healthiest sperm are collected and placed in your womb in a small tube to coincide with ovulation. ^{1,2} You may suffer mild stomach cramps and sometimes you may feel pain when the tube is inserted. ² The success rates for IUI, using fertility drugs, are around 15 percent per cycle of treatment, provided that the sperm and tubes are both healthy. ²

In vitro fertilisation (IVF)

Around one baby in every 80 is born as a result of IVF treatment.² Your chances of having a baby through IVF depend on your age.¹ For example, one in four women under 30 have babies after IVF, but only one in ten by the age of 40.²

It involves:¹

1. 'Switching off' the natural cycle of egg production in the ovaries.
2. Stimulating the ovaries to produce more than one egg.
3. Collecting the mature eggs from the ovaries.
4. Collecting sperm.
5. Mixing the eggs and sperm in a laboratory dish.
6. Incubating the fertilised eggs for a few days.
7. Putting one or two embryos (an egg that has started to develop) into the womb after a few days.
8. If the embryo attaches to the inside of the womb and continues to grow, it results in pregnancy.

Acupuncture and IVF

Although more research needs to be carried out, a number of small trials suggest that acupuncture does increase the live birth rate when performed around the time of embryo transfer.⁴ However, larger studies are needed before doctors can safely say that it won't cause any harm in early pregnancy.⁴

Intracytoplasmic sperm injection (ICSI)

ICSI was introduced in 1992 as a revolutionary treatment for male infertility.² A single sperm is injected directly into an egg, increasing the chances of fertilising eggs more than if IVF is used on its own.¹ You may also be offered ICSI if you have already tried IVF and produced eggs but your eggs did not fertilise.¹

Gamete intra-fallopian transfer (GIFT)

GIFT sees your eggs and sperm being collected in exactly the same way as for IVF. The healthiest are chosen, mixed together and placed in one of the fallopian tubes so fertilisation happens inside your body.² It can help in cases where there is unexplained fertility and there is nothing wrong with your fallopian tubes.²

Egg, sperm and embryo donation

Nearly 2,000 babies are born a year through egg, sperm and embryo donation.² Until 2006 people who donated eggs, sperm and embryos could do so anonymously.² However, the Human Fertilisation and Embryology Authority (HFEA) has recognised that people have a right to know about their genetic history.² People conceived using eggs, sperm or embryos from donors who registered (or re-registered) after April 1, 2005 will be able to consult the HFEA register and find out who the donor was, once they reach 18.²

Donor insemination

The sperm is placed, using a tube, at the entrance of your womb – cervix – or in the womb using intra-uterine insemination (IUI), which gives you a better chance of getting pregnant.^{1,2}

You may want to consider using donor insemination if:¹

- Sperm count or quality is low and you don't want ICSI
- Your partner's semen contains no sperm
- Your partner has an infectious disease or genetic disorder which could be passed on
- His blood group is not compatible with yours.

Donor insemination can be used for IVF, if necessary.¹

For women under 35, the success rate is around 14 percent for each attempt. This falls to eight to nine percent for the 35 to 39 age group and four to five percent for those between 40 and 42.²

Egg donation

The eggs are collected from your donor and mixed with your partner's or donor sperm. Alternatively, the sperm is injected directly into the eggs using **ICSI**.² When the embryos begin to develop, they're transferred to your womb as in standard **IVF**. Occasionally, eggs and sperm are transferred together using **GIFT**.²

You may want to consider using another woman's eggs if:¹

- Your ovaries have stopped working early, or after chemotherapy or radiotherapy
- You have a genetic disorder which could be passed on
- Your ovaries have been removed
- IVF treatment hasn't worked.

Donor eggs are screened for infectious or genetic diseases.¹

Egg sharing

This is where a woman undergoing IVF donates some of her eggs to reduce IVF treatment costs.^{1,2}

Surrogacy

This is when another woman carries, and gives birth to a baby for you. It's vital that both parties understand the implications and you'll need to take legal advice before starting the process. You may consider surrogacy if it's impossible or dangerous for you to get pregnant and give birth, or IVF hasn't worked.

Surrogacy can work in two ways:

1. You can use your partner's sperm, and the surrogate's eggs. Fertilisation is usually done by artificial insemination or by **IUI**. This is called full surrogacy
2. You can use your own eggs and your partner's sperm, or donated eggs inseminated with your partner's sperm. This involves **IVF** and is called partial surrogacy.

Freezing sperm, eggs or embryos

Sperm, eggs or embryos can be frozen and stored for possible use in the future, known as cryopreservation (freezing) and cryostorage (storage).¹ Some people choose this option as an 'insurance' before starting on medical treatment that may cause infertility.¹

Side effects and risks

Fertility drugs can have side effects, such as hot flushes, mood swings, nausea, breast tenderness, insomnia, increased urination and heavy periods.^{1,2} Rarely, your ovaries may get over-stimulated, causing ovarian hyperstimulation syndrome (OHSS) which can cause very serious problems.¹ Symptoms include nausea and vomiting, severe stomach pains and swelling, shortness of breath, faintness and reduced urine.² There have also been concerns about a possible link between stimulating ovaries with drugs and ovarian cancer, but the link remains uncertain.¹

As with IVF, you are at risk of having a multiple pregnancy which carries a higher risk of complications.¹ Currently one in four IVF births in the UK results in twins or triplets, compared to one in 80 births following natural conception.^{2,5} In 2008, the Human Fertilisation and Embryology Authority (HFEA) asked clinics to reduce multiple pregnancy rates from an average of 24 to 10 percent over the next three years because of the risks to mother and child.^{2,5}

If you are under 37 and have several high quality embryos, then best practice is to transfer a single embryo and freeze the others.^{2,5} Risks of multiple pregnancy include increased likelihood of miscarriage and death, prematurity and low birth weight.^{2,5} It can also lead to long-term health problems for children, such as cerebral palsy, and risks to mothers such as pre-eclampsia, diabetes and heart disease.^{2,5}

You have an increased risk of ectopic pregnancy with IVF, especially if there is something wrong with your tubes. Symptoms include vaginal bleeding, miscarriage and risk of the tube bursting.⁵

With intracytoplasmic sperm injection (ICSI), little is known about the risks because the technique has only been used since 1992. There may be an increased risk of miscarriage because the sperm might not normally have been able to fertilise an egg.²

More information:

Infertility Network UK

www.infertilitynetworkuk.com

The British Fertility Society

www.britishfertilitysociety.org.uk

Sources:

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3. Infertility Network UK
www.infertilitynetworkuk.com
4. The Cochrane Collaboration
Acupuncture and assisted conception
Cheong YC, Hung Yu Ng E, Ledger WL
www.cochrane.org/index.htm
5. The British Fertility Society
www.britishfertilitysociety.org.uk

A wide range of women's health resources are available at www.healthywomen.org.uk

Disclaimer: This article is for general information only and is not intended to replace a consultation with a healthcare professional, nor is it intended to provide specific medical advice and should not be used for the diagnosis or treatment of medical conditions.

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