## **General Information**

Around one in seven couples may have difficulty conceiving.

Some women conceive (get pregnant) quickly, but for others it can take longer. For every 100 couples trying to conceive naturally:

- 84 will conceive within one year
- 92 will conceive within two years
- 93 will conceive within three years

It's a good idea for a couple to visit their Gynaecologist if they have not conceived after one year of trying if a woman is younger than 35 years.

Women aged 36 and over, and anyone who is already aware they may have fertility problems, should see their Gynaecologist sooner.

## Infertility

The diagnosis of infertility is made when a couple have been trying for a baby for one year and have been unable to become pregnant.

There are two types of infertility:

- Primary Infertility where someone who has never conceived a child in the past has difficulty conceiving.
- Secondary Infertility where a person has had one or more pregnancies in the past, but is having difficulty conceiving again.
- The treatment offered will depend on what is causing your fertility problems.

## **Causes of Infertility**

Fertility problems can affect both men and women. There are many potential causes for infertility and, for 25% of couples, it may not be possible to identify a cause.

### Infertility in Women

#### Age

Infertility in women is linked to age. The biggest decrease in fertility begins during the mid-thirties. Among women who are 35, 95% will get pregnant after three years of having regular unprotected sex. For women who are 38, only 75% will get pregnant after three years of having regular unprotected sex.

#### **Ovulation Disorders**

- Infertility is most commonly caused by problems with ovulation (the monthly release of an egg). Some problems stop women releasing eggs at all, and some cause an egg to be released during some cycles, but not others.
- Ovulation problems can occur as a result of many conditions, such as: Polycystic Ovary Syndrome (PCOS) – a condition that makes it more difficult for your ovaries to produce an egg; Thyroid problems – both an overactive thyroid gland (hyperthyroidism) and can prevent ovulation or Premature ovarian failure – where a woman's ovaries stop working before 40 years.

#### Womb and Fallopian Tubes

The fallopian tubes are the tubes along which an egg travels from the ovary to the womb. The egg is fertilised as it travels down the fallopian tubes. When it reaches the womb, it is implanted into the womb's lining where it continues to grow.

If the womb or the fallopian tubes are damaged, it may be difficult to conceive naturally. This can occur following a number of factors outlined below.

- Pelvic Inflammatory Disease (PID): PID is an infection of the upper female genital tract which includes the womb, fallopian tubes and ovaries. It is often the result of a sexually transmitted infection (STI). PID can damage and scar the fallopian tubes, making it virtually impossible for an egg to travel down into the womb.
- Scarring From Surgery: Pelvic surgery can sometimes cause damage and scarring to the fallopian tubes. Cervical surgery can also sometimes cause scarring, or shorten the cervix (the neck of the womb).
- Cervical Mucus Defect: When you are ovulating, mucus in your cervix becomes thinner so that sperm can swim through it more easily. If there is a problem with your mucus, it can make it harder to conceive.
- Submucosal Fibroids: Fibroids are benign (non-cancerous) tumours that grow in or around the womb. Submucosal fibroids develop in the muscle beneath the inner lining of the womb wall and grow into the middle of the womb.
- Endometriosis: Endometriosis is a condition where small pieces of the womb lining, known as the endometrium, start growing in other places, such as the ovaries. This can cause infertility because the new growths form adhesions (sticky areas of tissue) or cysts (fluid-filled sacs) that can block or distort the pelvis. It can disturb the way that a follicle (fluid-filled space in which an egg develops) matures and releases an egg,

making it difficult for an egg to be released and become implanted into the womb.

• Sterilisation: Sterilisation involves blocking the fallopian tubes to make it impossible for an egg to travel to the womb. This process is rarely reversible and, if you do have a sterilisation reversed, it will not necessarily mean that you will become fertile again.

### **Medicines and Drugs**

The side effects of some types of medication and drugs can affect your fertility. These medicines are outlined below:

- Chemotherapy Medicines used for chemotherapy (a treatment for cancer) can sometimes cause ovarian failure which means your ovaries will no longer be able to function properly. Ovarian failure can be permanent.
- Neuroleptic medicines are antipsychotic medicines often used to treat psychosis. They can cause missed periods or infertility.
- Spironolactone this is a type of medicine used to treat fluid retention (oedema). Fertility should recover around two months after you stop taking spironolactone.
- Illegal drugs such as marijuana and cocaine can seriously affect fertility, making ovulation (the monthly cycle where an egg is released from the ovaries) more difficult.

## Infertility in Men

### Semen

Male infertility is caused by abnormal semen (the fluid containing sperm that is ejaculated during sex). Possible reasons for abnormal semen include:

- Decreased number of sperm you may have a very low sperm count, or no sperm at all.
- Decreased sperm mobility this will make it harder for your sperm to swim to the egg.
- Abnormal sperm sperm can sometimes be an abnormal shape, making it harder for them to move and fertilise an egg.
- Many cases of abnormal semen are unexplained but can be due to a variety of factors.

### Testicles

The testicles are responsible for producing and storing sperm. If they are damaged it can seriously affect the quality of your semen. This may occur if you have, or have had in the past, any of the following:

- An infection of your testicles.
- Testicular cancer

- Testicular surgery
- A congenital defect (a problem with your testicles that you were born with).
- Undescended testicles (when one or both of your testicles has not descended into the scrotum).

#### **Ejaculation Disorders**

Some men experience ejaculation problems that can make it difficult for them to ejaculate. Ejaculation problems include:

- Retrograde ejaculation where semen is ejaculated into your bladder.
- Premature ejaculation where ejaculation occurs too quickly.

### Medicines and Drugs

Certain types of medicines can sometimes cause infertility problems. These medicines are listed below:

- Anabolic steroids often used illegally to build muscle and improve athletic performance. Long-term use or abuse of anabolic steroids can reduce sperm count and sperm mobility.
- Chemotherapy medicines used in chemotherapy can sometimes severely reduce sperm production.
- Illegal drugs such as marijuana and cocaine can also affect semen quality.
- Alcohol: Drinking too much alcohol can damage the quality of your sperm.

### Infertility in both men and women

There are many factors that can affect fertility in both men and women.

- Weight: Being overweight or obese reduces both male and female fertility. In women, being overweight can affect ovulation. Being underweight can also have an impact on fertility, particularly for women, who will not ovulate if they are severely underweight.
- Smoking: As well as affecting your general and long-term health, smoking can also adversely affect fertility.
- Occupational and Environmental Factors: Exposure to certain pesticides, metals and solvents can affect fertility in both men and women.
- Stress: If either you or your partner are stressed, it may affect your relationship. Stress can contribute to a loss of libido (sex drive), which in turn can reduce the frequency of sexual intercourse. Severe stress may also affect female ovulation and limit sperm production.

## **Diagnosing Infertility**

Tests for Women: Hormone Tests, Hysterosalpingogram, +/- Laparoscopy

Examination and Tests for Men: Doing a physical examination of the testicles – to look for any lumps or deformities. Further testing may include: A semen analysis – your semen will be tested to determine whether you have a low sperm count, low sperm mobility or abnormal sperm.

## **Treating Infertility**

The treatment you are offered will depend on what is causing your fertility problems may include ovulation induction, Intrauterine Insemination (IUI), In-Vitro fertilization (IVF) with or without Intracytoplasmic sperm injection (ICSI).

## **Preventing Infertility**

For some, adopting a healthier lifestyle through simple lifestyle changes, or staying up to date with regular health checks and tests, may help to prevent infertility.

### Lifestyle Changes

**Weight:** Women who are either underweight or overweight ovulate (release an egg) less regularly or sometimes not at all, compared to women of a healthy weight. Therefore, ensuring you maintain a healthy weight will make it easier to conceive.

Women with a body mass index (BMI) above 30 are likely to take longer to conceive. A BMI of less than 19 may mean you are ovulating less frequently.

Men with a BMI of 30 or over are likely to have reduced fertility. Regular exercise and a healthy diet can help maintain a suitable weight.

**Diet:** Make sure that you eat a nutritious, balanced diet of at least five portions of fruit and vegetables a day. Include carbohydrates such as wholemeal bread and pasta, and proteins such as lean meat, fish and pulses. Green, leafy vegetables are high in folic acid which can help prevent birth defects.

**Stress:** Stress can often affect fertility because it may lead to you having sex less frequently. For the best chance of becoming pregnant, you need to have sex every two to three days. Talk to your partner if you are feeling stressed and consider using counselling (talking therapy). You may also find regular exercise helpful.

**Medicines and Drugs:** illegal drugs such as marijuana or cocaine can affect fertility and can seriously damage the development of your baby if you fall pregnant.

#### Pre-pregnancy Advice

If you are planning a pregnancy you should be taking Folic Acid 400mcg daily.