Infertility

Infertility simply means difficulty with conceiving. It is described as 'primary infertility' if the couple have not achieved a pregnancy previously and 'secondary infertility' if they have, irrespective of its outcome. About 1 in 6 couples experience difficulty conceiving and some of these may need expert help. It is not clear whether infertility is actually getting worse over time or if we are simply becoming more aware of it because of changing cultures, career considerations and better healthcare provision.

What causes infertility?

The fact that a couple has not achieved pregnancy after a period of trying does not necessarily indicate there is a problem. Not many people appreciate that a couple having regular sexual intercourse has only a 1 in 4 chance of conceiving in any one month (or menstrual cycle). It is also not common knowledge that sperm can fertilise the egg only up to three days after sexual intercourse or that the egg is only available to be fertilised by sperm up to 24 hours after ovulation. Probably the most common reason couples have difficulty conceiving is inadequate sexual exposure, i.e. not enough sex. For any investigation of infertility to be worthwhile a couple needs to have had adequate unprotected sex at least twice weekly for more than twelve months. Infertility may be caused by problems in the male or female partner, both partners, or neither partner (so-called unexplained infertility).

Female problems

These are present in more than half of couples with infertility. The major female causes are absence of ovulation (anovulation) and damage to the fallopian tubes (tubal disease). Absence of ovulation can be due to various causes of which PCOS (see below) is the most common. Pelvic infections, pelvic surgery and endometriosis may damage the fallopian tubes although endometriosis also causes difficulty conceiving in women with normal tubes. Other touted female causes of infertility such as antibodies against sperm, disorders of cervical mucus, painful sexual intercourse and malformations of the womb are no longer thought to play a major role in fertility.

Male problems

These are present in about 1 in 4 couples with difficulty conceiving. They include absence of sperm, poor sperm quality (low count, slow movement and high proportion of abnormal sperm) and antibodies against sperm. These may be due to problems the man was born with or may have developed over time.

No problems

No cause may be found in about 1 in 4 couples with infertility (so-called unexplained infertility).

How is it investigated?

Investigation of infertility entails a systematic approach in both partners. We explore the medical, social, emotional and family histories, as well as the pattern of sex and associated difficulties. We perform a detailed examination of the reproductive organs. Weight and height ratios (BMI) of woman are checked as they play important roles in this condition.

Hormonal screen

These are performed over 1-2 menstrual cycles and include assessment of female ovarian function using blood tests for FSH, LH and Progesterone. Women who do not have regular ovulation or periods will be required to have additional blood tests (for prolactin and androgens).

Ovarian reserve tests

These help us to estimate the functional age and so fertility potential of a woman's ovaries. We undertake both blood (anti-mullerian hormone - AMH) and ultrasound (antral follicle count) tests of ovarian reserve.

Outpatient tubal patency test (HyCoSy)

We prefer to check normality of the fallopian tubes using an ultrasound test called HyCoSy. This is a straightforward outpatient procedure that takes about 45 minutes. Some women (either because of high BMI or presence of pelvic masses) are best suited to x-ray tests of tubal patency.

Sperm quality test

This is performed on ejaculated sperm (obtained by masturbation) after 3-4 days of sexual abstinence. It measures the number, movement and normality of sperm as well as presence of anti-sperm antibodies.

General fertility advice

The healthier a couple is, the better their chances of successful pregnancy. We therefore recommend a healthy lifestyle with balanced diet, regular exercise, avoidance of smoking and recreational drug use, limited use of alcohol/caffeine, and stress avoidance. Women should strive to maintain their BMI below 30 and other health problems should be controlled before trying for pregnancy. It is advisable to have tried to conceive for at least 12 months before seeking help, except if you or your partner have a condition that is known to delay/prevent conception. When trying to conceive, it is best to have intercourse regularly (2-3 times per week) rather than concentrating intercourse around the time of ovulation. We do not recommend temperature charts and other ovulation test kits as they add further strain at an already difficult time and do

not improve the chances of conception if the couple are having regular intercourse.

Treatment of infertility

Treatment of infertility depends on its cause. The only routine medicine recommended for women trying to conceive is one (400 microgram) tablet of folic acid daily. This helps to prevent problems with the development of the baby's spinal cord (spina bifida). It should be started before pregnancy actually occurs and continued for three months into pregnancy.

Medicines

The most commonly used specific infertility medicines are those that induce ovulation and these may be given as tablets, nasal puffs and/or injections. Others include medicines that are used to correct abnormal female hormone levels (such as hyperprolactinaemia).

Surgery

Surgery may be needed to release adhesions, treat endometriosis in the pelvis and/or re-open blocked fallopian tubes. We undertake laparoscope ovarian drilling for women with polycystic ovary syndrome who do not respond satisfactorily to other treatments.

Assisted conception

Some couples with infertility will ultimately need assisted conception, either because no other options are available to them or because other treatments have failed.

Polycystic ovary syndrome

Polycystic ovary syndrome (PCOS) is the most common cause of absence of ovulation. It results from inappropriate release of hormones from a gland in the brain and is associated with anovulation (absence of ovulation), absent or irregular menstrual periods and abnormal female hormone levels. Affected women are often overweight and have raised blood levels of male-type hormones leading to excessive growth of facial and body hair, oily skin and acne. Conditions that make women more likely to manifest PCOS include excessive blood levels of prolactin, low and high levels of thyroid hormone, stress, anxiety, extreme physical exertion (as with athletes), profound weight loss or gain (greater than 15% of body weight), anorexia, and serious illness. The condition appears to run in some families and may thus be inheritable. Women with PCOS have a higher risk of miscarriage. It predisposes to development of diabetes and hypertension in later life and increased risk of pre-cancers of the lining of the womb and breasts.

Treatment of PCOS

We treat the most worrying features women present to us with; this will be infertility in the vast majority. Weight loss to get BMI under 30 helps to control the features of PCOS.

Hormonal treatment - with the pill or progesterone tablets can maintain regular periods in women not ready to conceive. Oily skin, acne and excessive growth of facial and body hair can be treated with hormones (anti-androgens) and/or cosmetic measures like electrolysis.

Ovulation induction - using tablets (Clomid) or injections (Gonadotrophins) for women trying to conceive. The tablets are taken daily for five days starting on the second day of the menstrual period. We check for ovulation by blood test and/or ultrasound scan. The injections are given daily from the second day of the menstrual cycle until ovulation occurs and monitored by regular blood tests and/or ultrasound scans. About three-quarters of treated women in this way will ovulate but only a third become pregnant. Ovulation induction can result in the birth of twins or triplets (about 1 in 10 women).

Surgery - involves burning a few holes in one or both ovaries at laparoscopy. This achieves ovulation and pregnancy rates that are similar to the ones obtained following use of medicines.

Stress of infertility

Coping with infertility and its treatments is similar to being on a roller coaster because of the huge ups and downs that couples and individuals go through. Besides dealing with the emotions of infertility investigations and treatment, those that succeed have to deal with the emotions and anxieties of pregnancy while those that do not succeed have to deal with the emotions of carrying on with their lives. Infertility can be a life crisis, possibly the first that many people will have, and it can be of a very deep and difficult nature. It affects every aspect of live, including relationships between partners, family members, and fertile friends. It not only affects the present with long periods of treatment but also tarnishes the future with worry about how they will cope if the 'goal' is not achieved. It can colour the past with regret about missed opportunities. Although a difficult journey, most couples come through (successful or not) having grown within themselves and their relationships thus ensuring a fulfilled life albeit on a different route than originally planned.

Getting to treatment

Most people do not envisage fertility problems so they can hit very hard when they occur, particularly the realisation that one or both partners have problems. Suddenly, something they considered private becomes public. Many initially deny there is a problem thereby delaying getting help. They grapple with various unpleasant emotions, including denial, anger, guilt, blame, self-pity, jealousy, envy and feelings of worthlessness. Most experience these at some stage and should consider them normal in the circumstances. Talking the problems over with sympathetic family members, friends or a trained counsellor

can help people to cope better. It can equally be difficult when no reason for the infertility is found, leaving the couple in a dilemma as to what they could be doing wrong.

Treatment

People who decide to have treatment need to understand that this can be a lengthy process. Disillusionment quickly and easily sets in if their dream is not achieved quickly. This is frequently accompanied by feelings of isolation because they increasingly feel different from other couples. Life may be put 'on hold' out of a natural anxiety about missing hospital appointments for treatment. Couples often also have feelings of frustration, anger, resentment, anxiety, and moods that swing between great highs and lows depending on how well treatment is going. It helps to remember that:

"failed treatment is a failure of nature not of you"

After treatment

Couples will have mixed emotions and stresses if treatment is unsuccessful. Some will have feelings of relief that treatment is now over and they can get on with their lives. For some, there is a deep emptiness that they hopefully learn with the passage of time to accommodate but not forget (as with any other significant loss). Others go on to consider other options like adoption and will hopefully be aware that this has many other associated emotions. Some couples will feel they have grown together through the whole experience and will be happy to stop and enjoy the rest of their lives together.

"you are valuable with or without children"

Counselling

Infertility can create huge sources of stress that can lead to relationship difficulties. Some forms of treatment (like IVF) may be very stressful as well. Counselling is an important and often overlooked help for couples going through infertility. We provide access to specialist counsellors for this purpose. Infertility is often two-sided and so it is important to avoid laying blame. Research demonstrates that couples that attend together for investigation and treatment, and go through the whole process together, are better able to cope with the problem and its treatment.

Helpful hints

- try to take things one step at a time
- don't leave it too late to get help
- try to talk to someone who's been through it
- keep supporting and talking to each other; make time to talk
- try not to put life on hold; find enjoyment in other things
- find out relevant information and discuss them with your healthcare providers
- keep asking questions about the condition
- use the services that are provided, especially counsellors and support groups
- try to reach difficult decisions together

Useful resources:

CHILD
Charter House, 43 St. Leonards Road, Bexhill On Sea, East Sussex, TN40 1JA
Tel. 01424 732 361; Fax. 01424 731 858; Website: www.child.org.uk

FORESIGHT
Association for the Promotion of Pre-conceptual Care, 28 The Paddock, Goldalming, Surrey, GU7 1XD
Tel. 01483 427 839

ISSUE
The National Fertility Association, 114 Lichfield Street, Walsall, Birmingham, WS1 1SZ
Tel. 01922 722 888; Fax. 01922 640 070; Website: www.issue.co.uk

Jewish Association for Fostering, Adoption and Infertility (JAFA)
P.O. Box 20, Prestwich, Manchester, M25 5BY
Tel. 0161 773 3148

Living Without Children
38A Chase Green Avenue, Enfield, Middlesex, EN2 8EB
Tel. 0208 803 1162

VERITY

Polycystic Ovary Syndrome Support Group, Tindle Manor, 52-54 Featherstone Street, London, EC1Y 8RT

Women's Health Information Centre
52 Featherston Street, London, EC1Y 8RT
Tel. 0207 251 6580

Donor Conception Network
PO Box 265, Sheffield, S3 7YX
Tel. 020 82454369

British Infertility Counselling Association (BICA)
69 Division Street, Sheffield , S1 4GE
Tel. 01342 843880; Website. www.bica.net