Editorial

ABCs of Infertility

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Extent of the problem:

One in six couples have an unwanted delay in conception. Roughly half of these couples will conceive either spontaneously or with relatively simple advice or treatment.

Most couples presenting with a fertility problem do not have absolute infertility (that is, no chance of conception), but rather relative subfertility with a reduced chance of conception because of one or more factors in either or both partners.

Most partners with subfertility will conceive spontaneously or will be amenable to treatment, so that only 4% remain involuntarily childless. As a couple has a substantial chance of conceiving without treatment, relating the potential benefit of treatment to their chances of conceiving naturally is important to give a realistic appraisal of the added benefit offered by treatment options.

Chance of spontaneous conception:

- Conception is most likely to occur, in the first month of trying (about a 30% conception rate). The chance then falls steadily to about 5% by the end of the first year. Cumulative conception rates are around 75% after six months, 90% after a year, and 95% at two years. A reasonably high spontaneous pregnancy rate still occurs after first year of trying.
- A strong association exists between subfertility and increasing female age. The reduction in fertility is greatest in women in their late 30s and early 40s. For women aged 35-39 years, the chance of conceiving spontaneously is about half that of women aged 19-26 years.
- Duration of subfertility :

The longer a couple has to try to conceive, the smaller the chance of spontaneous conception. If the duration of subfertility is less than three years, a couple is 1.7 times more likely to conceive than couples who have been trying for longer. With unexplained subfertility of more than three years, the chances of conception occurring are about 1-3% each cycle.

- Definitions of subfertility :

Subfertility is a failure to conceive after one year of unprotected sexual intercourse.

Primary subfertility– a delay for a couple who have had no previous pregnancies.

Secondary Subfertility – a delay for a couple who have conceived previously, although the pregnancy may not have been successful (for example, miscarriage, ectopic pregnancy)

Is Subfertility getting more common ?

Fecundity rates maybe declining. However, it is difficult to separate changes in social behavior and trends delaying starting a family from other factors that might reduce the chance of conception, such as environmental factors. Several studies have reported a steady decline in mean sperm counts over the past few decades in Europe and the United States. They also reported that the incidence of testicular cancers, cryptorchidism, and hypospadias if increasing.

Major causes of subfertility :

The major causes of subfertility can be grouped broadly as ovulation disorders, male factors (which include disorders of spermatogenesis or obstruction), tubal damage, unexplained, and other causes, such as endometriosis and fibroids, the proportion of each type of subfertility varies in different studies and in different populations.

Factors affecting fertility

Increased chances of conception :

- Woman aged under 30years
- Previous pregnancy

- Less than three years trying to conceive
- Intercourse occurring during six days before ovulation, particularly two days before ovulation.
- Woman's body mass index (BMI) 20-30
- Both partners non-smokers
- Caffeine intake less than two cups coffee daily
- No use of recreational drugs.

Reduced chance of conception:

- Women aged over 35 years
- No previous pregnancy
- More than three years trying to conceive
- Intercourse incorrectly timed, not occurring within six days of ovulation
- Woman's BMI <20 or >30
- One or both partners smoke
- Caffeine intake more than two cups of coffee daily
- Regular use of recreational drugs.

The impact of subfertility

The impact of experiencing difficulty conceiving should not be underestimated for couples presenting with the problem. Many find it stressful to seek professional help for such an intimate problem and feel a sense of failure at having to do so. It is not uncommon for the problem to put a strain on the relationship which exacerbates the problem. General practitioners can provide invaluable support to couples undergoing investigation and treatment and for those faced with intractable infertility.

Preconception advice

If a couple are considering starting a family they may approach their general practitioner for advice on conceiving. Areas for discussion should include things that may improve the chances of conception or increase the chance of a successful outcome to the pregnancy (by minimizing the risk of abnormality or of pregnancy related complications for baby and mother)

Managing Subfertility

A couple presenting with a delay in conception should be dealt with sympathetically and systematically according to a locally agreed protocol of investigations. Many of these investigations can be started by the couple's general practitioner and completed in secondary care. A cooperative approach allows prompt diagnosis of the problem, after which a realistic discussion can take place about the prognosis – the couple's chance of conceiving spontaneously and of conceiving with different treatment options. Formulating a plan of action can help ease some of the distress associated with the problem.

The role of general practitioners

General practitioners are often the first contact for couples concerned about their fertility. They can offer advice and support that can alleviate anxiety. Their role includes giving general preconception advice taking a history, and starting appropriate test. They should try to see both partners together, although this may be difficult if they are registered with different practices. However, the couple should be encourages to approach the problem together and must understand that they will both need investigation. General practitioners can also ensure prompt and appropriate referral, and advise on local services available in secondary and tertiary care and local funding policies for investigations and treatment.