

Newsletter

Part 1

Year 1, Issue 3, June 2018

Female Infertility

Infertility – Emergent health problem of India

Infertility is a disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse. Infertility may be primary or secondary. As per world health organisation (WHO), one in every four couples in developing countries has been found to be affected by infertility. Available data indicates that at least 50 million couples worldwide experience infertility. Infertility is the emergent health problem in India as well. In India, as per recent data published in 2011-12 the prevalence of infertility problem ever experienced by currently married women was 8.8%, of which 6.7% women had ever experienced primary infertility and 2.1% women had ever experienced secondary infertility. The prevalence of currently infertile women was 4.6%. Around 27.5 million couples in India are facing the issue of infertility. Infertility factor is attributable to the male by 40% and 40% to female. 10% infertility problems are linked to both partners whereas 10% of infertility is unexplained.

As per one research study, it is found that among infertile women, 40% of the women had experienced irregular cycles as one of the most important symptom of infertility, 34.2% of women experienced heavy or light bleeding during menstrual cycle. 25.6% women suffered from earlier miscarriages whereas 21% of women were underweight. It is evident that a prevalence of infertility above the level of 5% suggests preventable or treatable causes. Poor egg quality and factors related to uterus, Fallopian tubes, vagina and cervix are the major causes of infertility among women. Many of these factors are reversible and can be corrected when diagnosed timely. Also, many factors are preventable if there is awareness. This escalating incidence has potentiality to create serious psychosocial, financial as well as emotional trauma on family. Infertility can become a social taboo for a female. Thus timely diagnosis, proper treatment and awareness about it can help to reduce the problem.

-Dr. Pravin Gund

Causes of Female Infertility

Causes of infertility are many and varied and involve male, female or a combination of factors. 40% of the cause is found within the female partner.

The most common causes of female infertility include -

1. Ovulation related problems -

Poor egg health or anovulatory cycles or infrequent ovulation caused due to-

A. Hormonal imbalance -

Follicle stimulating hormone (FSH) and luteinizing hormone (LH) are the prime hormones responsible for maintaining normal physiology of female reproductive system. Excess physical or emotional stress, a very high or very low body weight, or a recent substantial weight gain or loss, improper lifestyle can disrupt production of these hormones and affect ovulation.

B. Polycystic ovarian syndrome (PCOS) -

It's the most common cause of female infertility. PCOS involves hormone imbalance, which affects ovulation. PCOS is also associated with insulin resistance and obesity.

C. Thyroid dysfunction -

Imbalance in functioning of thyroid gland can interfere with the release of an egg from ovary (ovulation), which impairs fertility.

D. Hyperprolactinemia -

Excess production of hormone prolactin can cause defect in ovulation thus leading to infertility.

E. Premature Ovarian Failure -

This disorder is usually caused by an autoimmune response or by premature loss of eggs from ovary (possibly due to genetics or chemotherapy).

2. Fallopian tube related problems -

Fallopian tube blockage or damage caused due to

A. Previous history of ectopic pregnancy in which a fertilized egg implants and develops in a fallopian tube instead of the uterus.

B. Pelvic Tuberculosis is a major cause of tubal infertility worldwide.

C. Pelvic inflammatory disease is infection of the uterus and fallopian tubes due to chlamydia, gonorrhoea or other sexually transmitted infections.

D. Previous surgery

Various surgeries of abdomen or pelvis, including surgery for ectopic pregnancy may sometimes lead to blockage of fallopian tubes.

E. Endometriosis

This condition is characterized by excessive growth of the lining of the uterus, called the endometrium. Growth occurs not only in the uterus but also elsewhere, such as in the fallopian tubes, ovaries and the pelvic peritoneum. About 30-40% of patients with endometriosis are infertile.

F. Compression of fallopian tube due to fibroids.

3. Uterine problems -

A. Polyps, fibroids can block fallopian tubes or interfere with implantation of zygote in the uterus, affecting fertility.

B. Certain congenital anomalies such as septate uterus, bicornuate uterus, didelphic uterus, unicornuate uterus can cause trouble in achieving pregnancy.

C. Adhesions -

Adhesions cause different organs in the abdomen and pelvis to adhere with each other and as a result distort normal pelvic anatomy or cause decrease in mobility and function and therefore can be a cause of infertility.

D. Pelvic infections

PID can cause scar tissue in the pelvic organs and lead to infertility. It can also cause other problems, such as pelvic pain and tubal (ectopic) pregnancy.

4. Cervical problems -

A. Abnormal cervical mucus can prevent the sperm from reaching the egg or make it more difficult to penetrate the egg.

B. Cervical infections can hamper the activities of sperms.

C. Cervical stenosis is narrowing of cervix which can be caused by an inherited malformation or damage to the cervix.

5. Vaginal problems -

A. Vaginal infections if left untreated may cause damage to the tubes and also can prevent sperm from reaching the egg and cause infertility.

Newsletter

Year 1, Issue 3, June 2018

- B. Vaginismus is spasm of vaginal muscles specially during sexual inter course which does not allow proper copulation leading to infertility.
6. Improper lifestyle -
- A. Wrong eating habits like irregular timings and wrong choice of food leads to disruption of normal body metabolism leading to hormonal imbalance.
- B. Irregular sleeping habits are linked to obesity as well as disturbed metabolism leading to infertility.
- C. Lack of exercise -
Regular moderate exercise has been found to be beneficial for maintaining normal physiology including hormonal balance. Converse of this, that is, lack of exercise or consistent intense exercise has also been observed to cause hormonal imbalance.
- D. Alcohol Addiction can make women less fertile.
- E. Smoking reduces the chance of conceiving with each cycle.
- F. Use of illicit drugs such as cocaine, marijuana can lead to infertility.
- G. Very tight clothing affects proper circulation of blood within the body and may lead to certain vaginal infections.
7. Advanced Age -
A woman's fertility starts to decline in her early 30s, with the decline speeding up after 35.
8. Radiation -
Radiation can damage eggs and affect ovulation.
9. Genetic disorders -
A large number of infertility cases are due to genetic defects.
10. Medications -
Long term use of certain medications such as birth control pills may lead to infertility.
11. Autoimmune disorders -
The women's own immunity hampers fertility by affecting various fertility factors.
12. Unexplained infertility -
Unexplained infertility is infertility that is idiopathic, in the sense that its cause remains unknown even after an infertility work-up.
13. Environmental causes -
The ability to conceive may be affected by exposure to various toxins or chemicals in the workplace or the surroundings.

-Dr. Shachi Desai

Female Infertility- Is Prevention Possible?

Fertility has become a prevalent concern in the modern era. There are certain issues which cause infertility. Though not all, but many of the causes can be pinned down. Evaluation of the various causes and treating them accordingly can take a major toll considering the time factor.

Considering the rate at which infertility is increasing, it will be definitely wise to look at the preventive aspect for infertility. Fertility basically depends on various factors such as hormonal balance, health and proper functioning of reproductive system as well as complete body metabolism of both partners. In view of the same, avoiding the known causes of infertility can prove to be beneficial. The modifiable factors include:

1. Lifestyle modifications.
2. Age related consequences.
3. Medicines related awareness.

1. Lifestyle modifications

Incorrect lifestyle leads to various health hazards and disharmony in the hormones. Health disorders like PCOS are consequence of hormonal imbalance. Thus lifestyle modification can be important factor in maintaining favourable environment for fertility. The lifestyle modifications include healthy food, proper sleep, regular exercise along with minimal mental stress in daily life.

One cannot avoid stress in today's frantic life, but can definitely increase the capacity to deal with it. Yoga and pranayama are extremely efficacious tools to increase the capacity of mind to deal with stress. Along with this, use of alcohol, tobacco, illicit drugs, carbonated drinks and excess consumption of tea and coffee should be avoided.

Amongst other factors maintaining personal hygiene and avoiding tight clothing are helpful to maintain health of the reproductive organs.

2. Age related awareness -

Advanced age is one of the risk factors of infertility. Fertility in female begins to decline above 30 years of age. Therefore, planning parenthood before that is advisable.

3. Medicines related awareness -

Certain medications such as birth control pills when used for a prolonged period may impact female fertility.

4. Counselling -

1. Counselling of both partners is important if at all there is a plan to delay parenthood so that basic screening for fertility is made which gives good time to correct necessary factors if detected. This especially helps to avoid STRESS which comes as an inherent factor if the problems are detected at the actual time of planning for conception.

2. Preconception counselling -

A comprehensive treatment plan of at least three months before starting to plan a baby can help boost the fertility of both partners and achieve conception without any hurdles.

-Dr. Mrunal Satpute

Published by Dyumna Womens Clinic

Contact : care@dyumnawomensclinic.com www.dyumnawomensclinic.com Ph. No : 020-25465886

Disclaimer : This document is for internal use only. Though all efforts have been made to ensure the accuracy of the content in this newsletter, the organization and the editorial board gives no warranty, representation or undertaking on whether expressed or implied, nor does it assume any legal liability, whether direct or indirect, or responsibility for the accuracy, completeness, or usefulness of any information.

Designed by Creative Funnel