



Glossary

Abstinence- refraining from sexual stimulation to the point of ejaculation.

Acrosome- a compartment at the tip of the sperm head containing enzymes, which will breakdown the protective outer layer of the egg. The process of releasing these enzymes so the sperm can potentially fertilize the egg is called the acrosome reaction.

Anti-sperm Antibodies- antibodies specific to a male's sperm produced by the female or male partner. These antibodies can lead to destruction of the sperm and reduced fertility.

Artificial Insemination- placement of sperm inside the female reproductive tract. A number of different techniques may be employed to increase pregnancy rates depending upon the needs of the patient.

Artificial Insemination Donor (AID)- artificial insemination using donor sperm.

Assisted Reproductive Technology (ART)- advanced procedures used to assist in achieving pregnancy. Includes procedures such as IVF and GIFT.

Azoospermia- the absence of sperm in the semen or failure of sperm production.

Capacitation- a series of biochemical events that sperm undergo while traveling through the female reproductive tract. Sperm capacitation allows the sperm to acrosome react. Capacitation is necessary in order for a sperm to fertilize the egg.

Cervix- the opening to the uterus from the vagina.

Conception- the onset of pregnancy usually marked by the implantation of an embryo into the uterine lining.

Cryopreservation- the process of preserving embryos, sperm or oocytes (eggs) by freezing.

Donor Sperm- sperm from a man who is not a woman's partner for the purpose of producing pregnancy.

Ejaculation -a sudden discharging of a fluid, such as semen, from a duct.

Fertilization- the combining of an egg and a sperm to create a new individual.

Gamete Intrafallopian Transfer (GIFT)- a method of assisted reproduction that involves removing an egg from the woman's ovary, combining it with sperm, and injecting the egg and sperm into the fallopian tube. Fertilization takes place inside the fallopian tube.

Hamster Egg Penetration Test (HEPT) - the most accurate test in predicting fertilizing ability of sperm. It can also predict the ability of laboratory techniques to improve sperm fertilizing ability. The sperm samples are evaluated for penetration capability. Also known as Sperm Penetration Assay (SPA).

Hypo-osmolarity test (HOS)- a diagnostic test included in a semen analysis which yields information about the functional integrity of the sperm membrane. Used in conjunction with the sperm viability, sperm motility and sperm agglutination results, it can predict the possible clinical presence of anti-sperm antibodies.

Implantation- the process of attachment of the embryo to the endometrial lining of the uterine wall.

Infertility-the inability of a couple to achieve conception after one year of unprotected intercourse or the inability to carry direct pregnancy to live birth. More commonly known as subfertility.

Insemination- the artificial introduction of semen into the genital tract of a female for the purpose of inducing conception; often referred to as intrauterine insemination (IUI) or intracervical insemination (ICI) depending on the placement of the semen in the female reproductive tract.

Intracytoplasmic Sperm Injection (ICSI)- a technique by which a sperm is manually injected into the egg. This technique is used in conjunction with IVF.

In Vitro Fertilization (IVF)- a method of assisted reproduction that involves removing eggs from a woman's ovary, combining the egg with sperm in a dish and replacing the resulting embryos in the woman's uterus.

Lubricant- a substance, such as an oil or lotion, capable of reducing friction when introduced as a film between solid surfaces. The use of certain lubricants can be damaging to semen quality and so should not be used during semen collection.

Luteinizing Hormone- a hormone produced by the pituitary, which acts upon the ovaries to prompt ovulation. About 36 hours before ovulation, the level of LH will greatly increase in the blood and subsequently the urine. This increase in LH is the "LH surge" and may be detected by testing the urine.

Male Factor Infertility- infertility caused by semen or sperm abnormalities. This may include the production of insufficient numbers of sperm, insufficient sperm motility or sperm with abnormal morphological characteristics.

Masturbation- self-manipulation of the genitalia commonly resulting in orgasm which is achieved exclusive of intercourse or fellatio.

Ovulation the discharge of a secondary oocyte (egg) from the ovary. Ovulation usually occurs approximately 14 days prior to the end of the reproductive cycle.

Prostate Gland- a gland found at the base of the male urethra that secretes nutrients and buffers in an alkaline fluid and is a major constituent of the ejaculatory fluid.

Semen -composition of sperm and seminal fluid released from the male urethra during ejaculation.

Semen Analysis- the most economical method of evaluating male fertility. It is usually the first evaluation for the male investigating infertility with his partner. The major parameters of the semen analysis include the sperm concentration, progressively motile sperm count, and sperm morphology.

Sperm Motility- the percentage of all moving sperm in a semen sample. Provides information on the ability of the sperm to reach the site of fertilization and may be indicative of fertility problems.

Sperm Penetration Assay (SPA)- see Hamster Egg Penetration Test (HEPT).

Sterile- free from living organisms and especially microorganisms. It is also a term given to a male who has no possibility of achieving fertilization via ejaculation.

Testicles- male sex glands, which produce spermatozoa (mature sperm) and the male hormone testosterone.

Uterus- a muscular organ in the female where the fertilized egg implants and the subsequent embryo and fetus develops. The lining of the uterus (endometrium) provides nutrients for the developing baby. The cavity opens through the cervix and into the vagina. The fallopian tubes extend from the top of the uterus and lead to the ovaries.

Vagina- the female organ of sexual intercourse, where the sperm are deposited. It also serves as the birth canal.

Vas Deferens- a thick-walled tube that begins at and is continuous with the tail of the epididymis within the testis and eventually joins the duct of the seminal vesicle to form the ejaculatory duct. They transport sperm from the epididymis to the urethra.