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1. **SPERMATOGENESIS:** Spermatogenesis is the process by which haploid spermatozoa develop from germ cells in the seminiferous tubules of the testes. This process starts with the mitotic division of the sperm cells located close to the basement membrane of the tubules. These cells are called spermatogonial stem cells. The mitotic division of these produces two types of cells. Type A cells replenish the stem cells, and Type B cells differentiate into primary spermatocytes. The primary spermatocyte divides mitotically [meiosis 1] into 2 different spermatocytes: each secondary spermatocyte divides into 2 equal haploid spermatids by meiosis 2. The spermatids are transformed into spermatozoa [sperm] by the process of spermiogenesis. These develop into mature spermatozoa, also known as sperm cells. Thus, the primary spermatocytes give rise to two cells, the secondary spermatocytes and the two secondary spermatocytes by their subsequent division into 4 spermatozoa and 4 haploid cells. Spermatogenesis produces mature male gametes, commonly called sperm but more specifically known as spermatozoa, which are able to fertilize the counterpart female gametes, the oocytes, during conception to produce a single celled individual known as a zygote.
2. **Testosterone:** Testosterone is the primary male sex hormone and anabolic steroid in male humans, testosterone plays a key role in the development of male reproductive tissues such as testes and prostate, as well as promoting secondary sexual characteristics such as increased muscle and bone mass, and the growth of body hair. In addition, it is involved in health and well being, and the prevention of osteoporosis. It is a steroid from the androstane class with a keto and hydroxyl at positions 3 and 17 respectively, it is biosynthesized in several steps from cholesterol and is converted in the liver to inactive metabolites. It exerts its action through binding to and activation of the androgen receptor. In humans and most other vertebrates, it is secreted primarily by the testicles of males, and to a lesser extent, the ovaries of females. On average, in adult males, its levels are about 7-8 times as great as in adult females.
3. **Male Orgasm:** The fuel for the process leading to orgasm is testosterone, a hormone produced in steady supply by the testicles. The testicles also make millions of sperm each day, which mature and then mixed with whitish, protein-rich fluids. These fluids nourish and support the sperm so they can live after ejaculation for a limited time. This mixture of fluid and sperm, known as semen, is what is moved through the urethra and out the penis during orgasm. This sexual desire or libido, is key in kicking off the process that will lead to orgasm. If a man has no sex drive: for example, if he has clinically low testosterone or is suffering from depression; his body may not respond to sexual stimuli and he may not be able to experience orgasm. The steps that lead a man to successful orgasm include:

- a. Arousal: The man perceives something or someone that prompts sexual interest.
 - b. Plateau: The male body prepares for orgasm in this phase, which can last for 30 seconds to 2 minutes. Pre ejaculation occurs.
 - c. Orgasm: The orgasm itself occurs in two phases. In emission, the man reaches ejaculatory inevitability, the point of no return. Semen is deposited near the top of the urethra, ready for ejaculation. Ejaculation occurs in a series of rapid fire contractions of the penile muscles and around the base of the anus. Involuntary pelvic thrusting may also occur. The nerve causing the muscle contractions send messages of pleasure to the man's brain.
 - d. Resolution and Refraction: After ejaculation, the penis begins to lose its erection. About half of the erection is lost immediately, and the rest fades soon after. Muscle tension fades, and the man may feel relaxed or drowsy, according to Ingber. Men usually must undergo a refractory period, or recovery phase, during which they cannot achieve erection .
4. Semen: Semen, also known as seminal fluid, is an organic fluid that contains spermatozoa. It is secreted by the gonads [sexual glands] and other sexual organs of male or hermaphroditic animals and can fertilize the female ovum. In humans, seminal fluid contains several components besides spermatozoa: Proteolytic and other enzymes as well as fructose are elements of seminal fluids which promote the survival of spermatozoa, and provide a medium through which they can move or swim. Semen is produced and originates from the seminal vesicle, which is located in the pelvis. The process that results in the discharge of semen is called ejaculation. Semen is also a form of genetic material. In animals, semen has been collected for cryoconservation. Cryoconservation of animal genetic resources is a practice that calls for the collection of genetic material in efforts for conservation of a particular breed.
 5. Male infertility: It refers to a male's inability to cause pregnancy in a fertile female. In humans it accounts for 40- 50% of infertility. It affects approximately 7% of all men. Male infertility is commonly due to deficiencies in the semen, and semen quality is used as a surrogate measure of male fecundity.

IMMUNE FACTORS

Anti sperm antibodies [ASA] have been considered as infertility cause in around 10-30% of infertile couples. ASA production are directed against surface antigens on sperm, which can interfere with sperm motility and transport through the female reproductive tract . Inhibiting capacitation and acrosome reaction, impaired fertilization, influence on the implantation process, and impaired growth and development of the embryo.

GENETIC FACTORS

Chromosomal anomalies and genetic mutation account for nearly 10-15% of all male infertility cases.

1. Klinefelter's syndrome
2. Y chromosome deletion

OTHERS

1. Age[see also: paternal age effect]
2. Abnormal set of chromosome
3. Centrioles[13]
4. Neoplasia e.g. seminoma
5. Idiopathic failure
6. Cryptorchidism
7. Trauma
8. Hydrocele
9. Hypopituitarism in adult, hypopituitarism untreated in children[resulting in growth hormone deficiency and proportionate dwarfism].
- 10.
- 11.
- 12.
- 13.
- 14.