

BECKHE VALENTINA CHINOSO
8/ENGO8/023

BIO MEDICAL ENGINEERING
PHS 212 - PHYSIOLOGY

ASSIGNMENT TITLE: MALE REPRODUCTIVE FUNCTIONS

SPERMATOGENESIS:

This is the process of formation of sperms. It occurs in the male gonads testis. Testes are made up of many seminiferous tubules lined by germinal epithelium. Cells of this layer divide to form spermatozoa in the following stages:

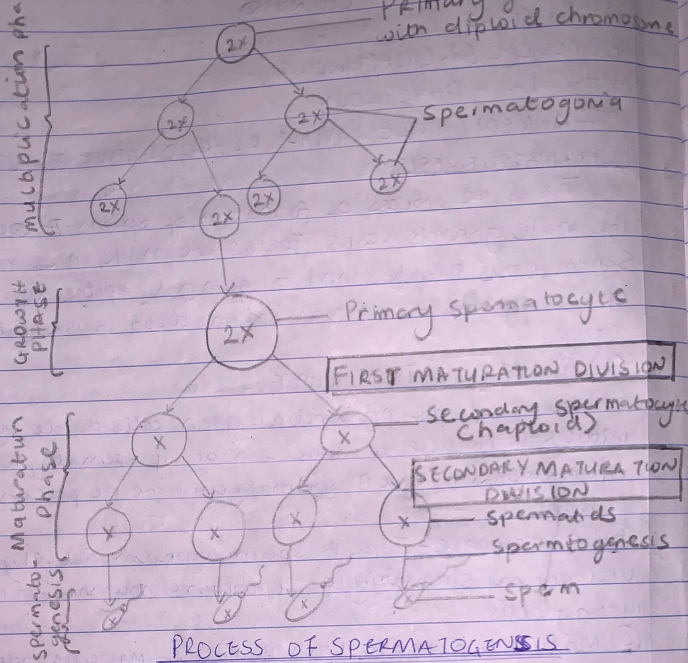
1) MULTIPLICATION PHASE

At maturity, the primordial germ cells divide by mitosis to produce a large number of spermatogonia. Type B spermatogonia are the precursors of sperms.

2) Growth phase: Type B spermatogonium actively grows to a primary spermatocyte. It obtains nourishment from nursing cells.

3) Maturation Phase: Each primary spermatocyte undergoes two maturation divisions. The first maturation division is meiotic and forms two haploid daughter cells called secondary spermatocytes. Both secondary spermatocytes then undergo second maturation division to form four haploid spermatids.

4) Spermiogenesis: It is the process of transformation of spermatid to a spermatozoon. The spermatid becomes the head of the sperm, the Golgi apparatus, containing proteolytic enzymes, becomes the acrosome cap.



2) TESTOSTERONE

This is a 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, testosterone is involved in health and well-being, and the prevention of osteoporosis. In sufficient levels of testosterone in men may lead to abnormalities including frailty and bone loss.

3) SEMEN: - Semen is a grayish white bodily fluid that

is secreted by the gonads of male humans. It carries sperm and fructose and other enzymes that

is due to the Spermatozoa contained within it.

MALE ORGASM:- Orgasm is an intense transient peak sensation of intense pleasure creating an altered state of consciousness associated with reported physical changes. Orgasm and ejaculation often happen simultaneously. ~~The~~ ~~the~~ pleasure mounts and you shoot, semen from your penis, then you're in an ejaculatory orgasm. Again you don't have to expel semen to have an orgasm. Not everyone ejaculates with orgasm, and even those that do may not ejaculate every time.

MALE INFERTILITY:

Male infertility is due to low sperm production, abnormal sperm function or blockages that prevent the delivery of sperm. Illness, injuries, chronic health problems, lifestyle choice and other factors can play a role in causing male infertility.

Symptoms:

1. The main sign of male infertility is the inability to conceive a child.
2. Problems with sexual function - e.g. difficulty in ejaculation or small volumes of fluid, reduced sexual desire or erectile dysfunction.
3. Ablower than normal sperm count (fewer than 15 million sperm per milliliter of semen)
4. ~~Agne~~ pain, swelling or a lump in the testicle area or when to see a doctor.

- Erection/ejaculation problems
- Pain, discomfort, a lump in the testicles
- A groin, testicle, penis or scrotum surgery

Causes

- 1) Infections
- 2) Ejaculation issues
- 3) Tumors
- 4) Undescended testicles

- 5 Industrial chemicals
- 6 Radiation/x rays
- 7 Drug abuse
- 8 ^{excess} Alcohol
- 9 weight - Obesity

Prevention

- 1 Reduce stress
- 2 Keep the weight off
- 3 Don't smoke
- 4 Limit or Abstain from alcohol
- 5 Avoid exposure to pesticides, heavy metals and other toxins.