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Discuss the factors facilitating the movement of sperm in the female reproductive tract

1) Prostaglandins (physiologically active substances) in the semen are thought to stimulate uterine motility at the time of intercourse and assist in the movement of sperms to the site of fertilization in the ampulla of the uterine tube and it also cause backward revere peristatic contractions in the uterus and fallopian tube in other to move the ejaculated sperm towards the ovaries

2) Fructose, secreted by the seminal glands, is an energy source for the sperms in

The semen. Because of their paucity of cytoplasm, spermatozoa require an external energy source.

3) Oxytocin released from the posterior pituitary gland facilitate the transport of sperms through the female genital tract up to the fallopian tube, by producing the uterine contraction during sexual intercourse.

4) Prostatic fluid provides optimum pH for the motility of sperm. Generally, sperms are non-motile at pH of less than 6.0, vagina secretions in females are highly acidic with pH 3.5 to 4.0, the alkaline prostatic secretion which is also present in semen, neutralizes the acidity in vagina and maintains a pH of 6.0 to 6.5, at this pH, the sperm becomes motile.

5) During fertilization, the sperm enters the ovum by penetrating the multiple layers of gronulosa cells known as corona radiate present around the ovum. It is facilitated by hyaluronidase and proteolytic enzymes present in acrosome of sperm.

6) The next barrier facing the sperm is the cervix. The cervical entrance (os) is not only very small, but it is blocked by cervical mucus. During most times in menstrual cycle, cervical mucus is highly sticky and represent an almost impenetrable barrier to sperm penetration. Around the time of ovulation, however, the estrogenic environment of the female reproductive system brings about **a change in cervical mucus,** rendering it more watery and more amenable to penetration of sperm.