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Nursing 200 level

Phs212

Factors that facilitate the movement of sperm cells in the female reproductive tract

- (1) Alkaline secretions from prostate gland into semen helps to create an alkaline environment in the acidic vagina to protect the sperm in the vagina.
- (2) Prostaglandins(present in semen and the female reproductive tract) facilitates myometrial contractions to help the movement of sperm towards the oviduct.
- (3) Oestrogen and oxytocin secreted in the female helps to assist myometrial contractions in order to facilitate the upward motility of sperm towards the oviduct.
- (4) Estrogen facilitates the production of a watery mucus in the cervix during the timing of ovulation to allow the easy passage of sperm.

*In the female reproductive tract, sperm undergoes capacitation(priming) of sperm. This occurs after the sperm membrane becomes more fluidy ensuring the removal of cholesterol and glycoproteins from the membrane in order to expose the zona- pellucida binding type.

*a change in sperm membrane potential that permits calcium to enter the sperm via a voltage-gated mechanism to facilitate vesicle release for the acrosomal reaction.

* during capacitation,there is phosphorylation of numerous proteins needed in fertilization.