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

1. The alkaline secretion from the prostrate gland into the semen helps to create an alkaline environment in the acidic vagina to protect the sperm from being destroyed in the vagina.
2. The prostaglandin present in the semen and female reproductive tract facilitate myometrial contractions to help the movement of sperm towards the oviducts.
3. Estrogen and oxytocin secreted in the females help to assist myometrial contractions in order to facilitate the awkward fertility of the sperm towards the oviducts.
4. Estrogen facilitates the production of watery mucus in the cervix during the timing of the ovulation to allow easy passage of sperm.
5. Capacitation the last phase of sperm maturation has been well studied in mammals. By this process, the sperm acquires the physiological ability to undergo acrosome reaction and fertilization competency after reaching the female genital tract. In the female reproductive tract, sperm undergoes capacitation;
6. Occurs after sperm membrane becomes more fluid via removal of cholesterol of proteins and carbohydrates from the membrane that may otherwise block sites that bind to the zona pellucida.
7. A change in membrane potential that permits Ca2+ to enter the sperm via voltage-gated mechanism to facilitate vesicle releasee for the acrosome reaction.
8. Phosphorylation of numerous proteins needed in fertilization.