

Menstual cycle

[Health & Medicine](#), [Nursing](#)



Menstrual Cycle due: The menstrual cycle refers to a recurring monthly cycle that takes place in the reproductive tract of a woman's body; this cycle is associated with menstruation as well as inter-menstruation. This preparation consists of emission of blood, tissue, and debris from the uterus; as the endometrium sheds. This flow lasts for four to six days. There are two main parts of the menstrual cycle that is the ovarian and uterine cycle. This paper will critically discuss the normal response of ovaries during the menstrual cycle, as well as the hormones secreted and the mechanism for feedback and control.

Ovarian cycle is dependent on two of the three gonadotropic hormones that are produced by the anterior pituitary gland. These hormones include follicle stimulating hormone (FSH) and luteinizing hormone (LH). The follicular phase is controlled by the FSH, which includes days 1 to 14, and the luteal phase is controlled by LH, which includes days 15 to 28 of a 28 day (normal) cycle. At the commencement of each menstrual cycle, FSH stimulates follicle development. This result to estrogen production, causing maturation of the ovum contained within the follicle. Oestrogen levels increase as the follicle grows; this high level of oestrogen triggers the pituitary gland to release a surge of LH. This is a positive feedback effect as the levels of oestrogen will be high; causing the muscle and uterine lining layers to be thicker in anticipation of an embryo. This abrupt increase of LH results to the follicle bursting open. This act releases the mature ovum into the abdominal cavity. This process (ovulation) takes place on day 14; the floating ovum is then drawn towards the fallopian tube and travels to the uterus (Ricci & Kyle, 2009).

After ovulation, LH levels remain increased and cause the fragments of the follicle to develop into the corpus luteum. Corpus luteum secretes progesterone hormone. The work of progesterone is to maintain the uterus lining. If fertilization fails to take place, then, the corpus luteum disintegrates and the levels of oestrogen and progesterone drop. This drop is triggered by a negative feedback effect on the pituitary due to the combination of oestrogen and progesterone; causing the uterine lining to shrink menstruation commences. This marks the start of another of the follicular phase; which is again day one of the cycle (Rosdahl & Kowalski, 2008). In conclusion, if fertilization occurs, then the negative feedback effect on the pituitary will not be experienced as progesterone level will be produced and maintained steadily. This is because the implanted embryo will produce human chorionic gonadotrophin which maintains the corpus luteum from disintegrating.

References

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