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Human Reproduction

Menstrual cycle: The reproductive cycles in female primates is called menstrual cycle. It start at puberty and is called **menarche**.

Phases of Menstrual Cycle

The menstrual cycle consists of following four phases:

(1) Menstrual Phase:

- (i) In a 28 days menstrual cycle, the menses takes place on cycle days 3-5.
- (ii) The production of LH from the anterior lobe of the pituitary gland is reduced.
- (iii) The withdrawal of this hormone causes degeneration of the corpus luteum and, therefore progesterone production is reduced.
- (iv) Production of oestrogen is also reduced in this phase.
- (v) The endometrium of uterus breaks down & menstruation begins.
- (vi) The cells of endometrium secretions, blood & unfertilised ovum constitutes the menstrual flow.

(2) Follicular Phase:

- (i) This phase usually includes cycle days 6-13 or 14 in a 28 days cycle.
- (ii) The follicle stimulating hormone (FSH) secreted by the anterior lobe of the pituitary gland stimulates the ovarian follicle to secrete oestrogens.
- (iii) Oestrogen stimulates the proliferation of the endometrium of the uterine wall.

(iv) The endometrium becomes thicker by rapid cell multiplication and this is accompanied by an increase in uterine glands & blood vessels.

(3) Ovulatory Phase:

(i) Both LH & FSH attain a peak level in the middle of cycle (about 14th day).

(ii) Oestrogen concentration in blood increases.

(iii) Rapid secretion of LH induces rupturing of graffian follicle and thereby the release of ovum.

(iv) In fact LH causes ovulation.