

NAME: AKEREDOLU BLESSING ANUOLUWA

MATRIC NO: 18/MHS02/027

DEPARTMENT: NURSING

COURSE CODE: PHS212

QUESTION 1

BRIEFLY DISCUSS THE CYCLIC CHANGES IN ANY OF THE FOLLOWING

CERVIX

Cervix is the lowest region of the uterus, it attaches the uterus to the vagina and provides a passage long, projects between the vaginal cavity and the uterine cavity. The cervix, only about 4 centimeters (1.6 inches) about 2 centimeters into the upper vaginal cavity

Mucus membrane of the cervix also shows cyclic changes during different phases of menstrual cycle

POLIFERATIVE PHASE

During poliferative phase, the mucus membrane of cervix becomes thinner and more alkaline due to the influence of estrogen. It helps in the survival and motility of spermatozoa.

SECRETORY PHASE

During secretory phase, the mucus membrane of cervix becomes more thick and adhesive because of actions of progesterone.

VAGINA

Vagina is a short tubular organ. It is lined by mucus membrane, which is

formed by stratified epithelial cells.

POLIFERATIVE PHASE

. Epithelial cells of vagina are cornified. Estrogen is responsible for this.

SECRETORY PHASE

Vaginal epithelium proliferates due to the actions of progesterone. It is also infiltrated with leukocytes. These two changes increase the resistance of vagina for infection.

QUESTION2

EXPLICATE MENSTRAUL CYCLE

Menstrual cycle is defined as cyclic events that take place in a rhythmic fashion during the reproductive period of a woman's life. Menstrual cycle starts at the age of 12 to 15 years, which marks the onset of puberty. The commencement of menstrual cycle is called **menarche**. Menstrual cycle ceases at the age of 45 to 50 years. Permanent cessation of menstrual cycle in old age is called **menopause**.

DURATION OF MENSTRUAL CYCLE

Duration of menstrual cycle is usually 28 days. But, under physiological conditions, it may vary between 20 and 40 days.

CHANGES DURING MENSTRAUL CYCLE

During each menstrual cycle, series of changes occur in ovary and accessory sex organs.

These changes are divided into 4 groups:

1. Ovarian changes
2. Uterine changes
3. Vaginal changes
4. Changes in cervix.

All these changes take place simultaneously

Phases of the menstrual cycle

The four main phases of the menstrual cycle are:

- menstruation
- the follicular phase
- ovulation
- the luteal phase.

Menstruation

Menstruation is the elimination of the thickened lining of the uterus (endometrium) from the body through the vagina. Menstrual fluid contains blood, cells from the lining of the uterus (endometrial cells) and mucus. The average length of a period is between three days and one week.

Sanitary pads or tampons are used to absorb the menstrual flow. Both pads and tampons need to be changed regularly (at least every four

hours). Using tampons has been associated with an increased risk of a rare illness called toxic shock syndrome (TSS).

Follicular phase

The follicular phase starts on the first day of menstruation and ends with ovulation. Prompted by the hypothalamus, the pituitary gland releases follicle stimulating hormone (FSH). This hormone stimulates the ovary to produce around five to 20 follicles (tiny nodules or cysts), which bead on the surface.

Each follicle houses an immature egg. Usually, only one follicle will mature into an egg, while the others die. This can occur around day 10 of a 28-day cycle. The growth of the follicles stimulates the lining of the uterus to thicken in preparation for possible pregnancy.

Ovulation

Ovulation is the release of a mature egg from the surface of the ovary. This usually occurs mid-cycle, around two weeks or so before menstruation starts.

During the follicular phase, the developing follicle causes a rise in the level of oestrogen. The hypothalamus in the brain recognises these rising levels and releases a chemical called gonadotrophin-releasing hormone (GnRH). This hormone prompts the pituitary gland to produce

raised levels of luteinising hormone (LH) and FSH.

Within two days, ovulation is triggered by the high levels of LH. The egg is funnelled into the fallopian tube and toward the uterus by waves of small, hair-like projections. The life span of the typical egg is only around 24 hours. Unless it meets a sperm during this time, it will die.

When you want to have a baby you can improve your chance of getting pregnant if you know about ovulation and the 'fertile window' in the menstrual cycle. Read more on ovulation and fertility window.

Luteal phase

During ovulation, the egg bursts from its follicle, but the ruptured follicle stays on the surface of the ovary. For the next two weeks or so, the follicle transforms into a structure known as the corpus luteum. This structure starts releasing progesterone, along with small amounts of oestrogen. This combination of hormones maintains the thickened lining of the uterus, waiting for a fertilised egg to stick (implant).

If a fertilised egg implants in the lining of the uterus, it produces the hormones that are necessary to maintain the corpus luteum. This includes human chorionic gonadotrophin (HCG), the hormone that is detected in a urine test for pregnancy. The corpus luteum keeps producing the raised levels of progesterone that are needed to maintain the thickened lining of the uterus.

If pregnancy does not occur, the corpus luteum withers and dies, usually around day 22 in a 28-day cycle. The drop in progesterone levels causes the lining of the uterus to fall away. This is known as menstruation. The cycle then repeats.