

ANATOMICAL STRUCTURE OF FEMALE SEX ORGANS IN SHEEP AND THEIR INFLAMMATION

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Abstract:

In sheep, the female reproductive organs include the vagina, clitoris, uterus, and ovaries. These organs are involved in important physiological processes. These organs are located in the pelvic cavity of sheep. Inflammations are common.

Keywords. Endometritis, inflammation, vulvitis, cervicitis, vaginitis, ovaritis, corpus luteum, pathological corpus luteum.

INTRODUCTION

Further development of livestock industries, financial support of livestock farms, further increase of livestock feed base, as well as on the basis of the population's cooperation with large livestock farms and processors of livestock products (hereinafter - in the method of cooperation) In order to organize the feeding of livestock in their households and to meet the demand for livestock feed base, the decision of the President of the Republic of Uzbekistan No. PQ-121 dated 08.02.2022 has defined specific plans for livestock breeding in our country. In our country, many scientific and practical works are being conducted in the field of animal husbandry. Breeding cattle and sheep are coming from foreign countries through investment. This situation imposes several tasks on veterinary staff.

Relevance of the topic

Diseases of female reproductive organs cause many problems among animals. As a result of the diseases, there is a decrease in the productivity of the animals, and the animals remain sterile. Among genital diseases, endometritis and ovarian diseases occupy the leading positions. According to the structure of female reproductive organs of sheep, it is studied in two parts. External genitalia (Genitalia externa) includes the labia, vaginal vestibule and clitoris; internal genitalia (Genitalia entera) includes vagina, uterus, fallopian tubes, ovaries and corpus luteum. The labia consist of inner and outer surfaces, the outer surface consists of non-pigmented skin rich in sweat and sebaceous glands, and the inner surface consists of a mucous membrane and is covered with a multi-layered flat epithelium. The labia are rich in elastic muscle fibers and a network of venous blood vessels and are filled with blood during sexual intercourse. Its inflammation is called vulvitis. Causes - various mechanical injuries during childbirth, purulent inflammation of the vagina and uterus. Symptoms include hyperemia of the mucous membrane, swelling of the skin of the labia, and swelling of the mucous membrane of the vagina. Sometimes it can erase small hematomas. When microbes enter the wounds, purulent

inflammation develops. As a result, purulent discharges accumulate on the surface of the labia, which form crusts when dried. With a more severe course of the disease, the development of necrosis of the mucous membrane, abscess and phlegmon or sepsis is noted.[1]

The clitoris is made up of a porous body and is the rudiment of the male sexual organ. There are many sensory nerves at the tip of the clitoris.

The vestibule is the most posterior part of the genital organs of sheep and ends with the outer lips. The mucosa of the vagina is covered with multi-layered epithelial cells. It contains lymph nodes and vestibular glands of the lower side. The length of the vestibule is 4-5 cm.

Qin is an organ of sexual intercourse and part of the birth canal. The back of the vagina opens into the vagina. The mucous membrane of the vagina is covered with flat multi-layered epithelial cells, and there are no glands. The muscle layer consists of inner circular and outer longitudinal fibers. The upper surface of the vagina is covered with a veil. Inflammation of the vaginal mucosa is called vaginitis. Causes This disease in sheep occurs as a result of damage and infection of the genitals during childbirth or during improper insemination. It also occurs due to inflammatory diseases of the uterus.

[2] Uterus - The uterus arises from the Müllerian duct during embryonic development. The embryo develops in the uterus, so its mucous membrane is adapted to the changes of the period, that is, it is adapted to receive the fertilized egg, to unite with the mother's body, and it is rich in blood vessels. The uterus consists of body and neck parts. The length of the cervix in sheep is 2-4 cm. The wall of the uterus consists of 3 layers: the outer uterine layer (perimetrium), the inner mucous membrane (endometrium) and the middle muscular layer (myometrium). Blood vessels and nerves pass through the outer serous membrane to the uterus. The mucous membrane is covered with cylindrical epithelial cells, which have tubular glands. Various folds are formed on the mucous membrane of the uterus. The muscular layer is well developed in the cervix and forms a sphincter. This sphincter opens only during intercourse and childbirth. On the mucous membrane of the uterine horns and body, there are four rows of semi-circular, burr-shaped caruncles, each row contains 10-14 caruncles. The number of caruncles in sheep is 88-110. The chorionic membrane is located on the upper layer of the fetus, and its suckers (crypts) grow inside the caruncles located on the uterine mucosa and ensure normal nutrition of the child. Inflammation of the uterus is different, and it is called by adding the suffix metritis to the name of the layer.

Cervicitis is an inflammation of the mucous membrane of the cervix. Causes Cervicitis occurs when the mucous membrane of the cervix is damaged during childbirth and when microbes or protozoa (vibrio) enter it during fertilization. The disease can occur due to the transition of the inflammatory process from the mucous membrane of the uterus or vagina to the cervix. Symptoms: in the acute period of the disease, the mucous membrane is hyperemic, swollen, painful and often bleeds. Viscous serous or serous-purulent exudate flows from the cervix. There are fibrinous coatings, bleeding, ulcers and erosion on the surface of the mucous membrane. Cervicitis often causes tissue necrosis.

Endometritis (Endometritis) - inflammation of the lining of the uterus. Reasons. Inflammation of the lining of the uterus is often caused by the penetration of streptococci, staphylococci, Pseudomonas aeruginosa, etc. into the uterine cavity. In addition, endometritis can occur as a

result of non-observance of veterinary-sanitary rules when working with spermatozoa during artificial insemination, as well as insemination of sheep with rams raised in conditions that do not meet hygienic requirements. At first, symptoms of endometritis occur locally, but when the general resistance of the body weakens and the microflora enters, the inflammatory process spreads to all layers of the genital organs, and as a result, a general septic process develops. The wall of the uterus is inelastic, painful, the cervix is hyperemic, swollen and slightly protruded, the cervical canal is open, purulent mucous exudate flows out of it with fibrin fragments and accumulates in the lower part of the vagina. With complications, the tissue becomes necrotic, and it decays. In this case, an unpleasant-smelling and reddish-colored exudate of purulent and rotten tissue is released from the vagina. [3]

Ovaries are oval shaped and located in the pelvic cavity between the tip and the base of the uterine horns in sheep. Ovaries are considered sex glands, in which the egg cell is formed, develops and matures. Also, female sex hormones - estrogens (estradiol, estrone, estriol) and corpus luteum hormone progesterone are produced, under the influence of these hormones sexual arousal, arousal and sexual inclination occur in female animals. The size of ovaries in sheep is 0.8-2 cm. The weight of the ovary in sheep is 1-2. The ovary is composed of cortex and medulla, with numerous follicles at different stages of development or atresia in the cortex (follicular portion) and reticular connective tissue in the medulla (vascular portion). There are blood vessels and nerve fibers.

In the follicles there are young egg cells (ovogonium) and oocytes of the first order, and the oocytes are surrounded by one-layer flat epithelial cells. An egg cell is formed from generative epithelial cells in the outer part of the ovary.

Several follicles can be formed in the ovary at the same time and begin to mature. Most of the formed follicles are reabsorbed at one or another stage of the process, that is, they undergo atresia.

Ovaries in sheep have a round shape. The egg cell formed from the generative cells is initially surrounded by the epithelium of the follicles, the epithelial cells of the follicle are constantly dividing and multiplying and surround the egg cell in several layers. Thus, the initial follicle is formed. Ovaritis (Oophoritis) - inflammation of the ovaries that occurs in acute and chronic form. The reasons are that the inflammatory process usually continues with the presence of perimetritis or acute endometritis. Symptoms In the acute period of ovaritis, the general condition of the animal worsens, appetite decreases, body temperature rises, ovaries enlarge, (intercellular infiltration of the stroma), pain is observed.

[4] The fallopian tube is located between the ovary and the horn of the uterus, where the egg cells fertilized in the ovary are fertilized and are transferred to the uterus. The length of the oviduct is 14-16 cm in sheep. Salpingitis (salpingitis) - inflammation of the mucous membrane of the fallopian tube. The disease is acute and chronic. This is caused by microbes that enter the uterus with purulent endometritis and, less often, with ovaritis. Clinically, it will not be possible to determine the acute catarrhal process in the ovaries. It is worth noting that due to chronic inflammation, connective tissue has grown, the path of the fallopian tubes is closed, and as a result, the animal becomes infertile.

The corpus luteum is an endocrine gland that produces the hormone progesterone, which affects the mucous membrane of the uterus and prepares it to receive the embryo. There are two types of corpus luteum: a) pharyngeal corpus luteum and b) pathological corpus luteum. [6]

Summary

It is important to know the anatomical location of female reproductive organs in sheep and to know their physiological functions. Proper animal care and proper veterinary care guarantee the prevention of obstetric and gynecological diseases among animals.

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