

Clinical Indicators of Cow Infertility Caused by Metabolic Disorders

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Abstract:

The article studied the clinical signs of nutritional infertility in dairy cows, skin, skin elasticity, appetite, mucous membranes.

Keywords: nutritional infertility, clinical examinations, clinical manifestations, skin, skin elasticity, appetite, mucous membranes.

Satisfying the needs of the population of our republic for environmentally friendly and high-quality livestock products, ensuring food security, establishing cooperative production and processing of meat and dairy products is one of the pressing issues.

Today, on the territory of the Aral Island, as a result of the deterioration of the ecological situation, soil salinization, the needs of productive cows for nutrients and biologically active substances are not fully satisfied, the feed supply is declining, the development of metabolic disorders in cows, vitamin deficiency in productive cows - as a result of impaired metabolism of mineral substances, decreased productivity, lengthened service period, nutritional infertility, decreased activity of the reproductive organs, growth retardation and birth of offspring. Calves with low vitality are observed.

In this regard, economic damage, causes, the importance of nutritional factors in their origin, development mechanisms, methods for early detection of nutritional infertility caused by disorders of vitamin and mineral metabolism in productive cows, the introduction into production of modern improved methods and means of treatment and prevention of diseases acquires important scientific and practical significance. Currently, in world veterinary practice, special attention is paid to the development of improved methods for identifying the etiology, treatment and prevention of these diseases.

In order to study the causes and clinical signs of nutritional infertility in highly productive cows of 3-4-year-old cows of the Gulom Ilkhom livestock farm, Khazorasp district, Khorezm region, study the clinical indicators of cows 50-65 days after calving on the principle of "similar pairs" from cows as a control group 10 heads were isolated and studies were carried out on indicators of clinical and physiological status.

It was noted that the level of obesity of cows on the farm is below average, hypovitaminosis, endometritis, mastitis, lengthening of the service period, insufficient restoration of the genital organs after childbirth, and infertility among cows.

A clinical examination of cows showed a decrease in appetite, 40 percent of the animals had dry skin, decreased elasticity, loss of skin, peeling, decreased shine, in 40 percent the visible mucous membranes became pale, and the reaction to external influences decreased. During the research period, the cows of this farm exhibited clinical signs characteristic of disorders of vitamin and mineral metabolism.

Also in cows there is a change in appetite (lick), severe whitening of the mucous membranes, depigmentation of hair around the eyes, lower jaw and forehead, hair loss (alopecia), enlargement and deformation of joints, loss in cows that have entered heat, snoring of the last caudal vertebrae was observed, movement of incisors and horny growths, spinal deformation, delayed manifestation of sexual reflexes. These indicators indicate a violation of the simultaneous metabolism of several minerals and vitamins in the animal's body and, as a consequence, nutritional infertility.

The average body temperature of infertile cows on a cattle farm is $38.2 \pm 0.04^\circ\text{C}$ (normally $37.5-39.5^\circ\text{C}$), the number of heart beats per minute is 70.1 ± 3.9 beats (normally 50-80 times per 1 minute), respiratory rate per 1 minute initially 29.5 ± 5.9 beats (normally 12-25 times per 1 minute), movement of the large abdominal wall per 5 minutes at the end of the average test - 6.1 ± 0.5 times (on average 5-12 times in 5 minutes).

It was found that 30-40 percent of cows in the farms where the surveys were conducted had clinical signs of alimentary infertility. In dairy cows, alimentary infertility is characterized by an increase in the pulse and respiratory rate, a decrease in the number of large abdominal contractions, pale mucous membranes, changes in appetite (licking), hair loss around the neck and eyes, flaking and loss of shine, and is accompanied by such clinical signs as deformation of joints and hooves.

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