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# **DISTRIBUTION OF PATHOLOGIES OF REPRODUCTIVE ORGANS IN DAIRY COWS OF CONCRETE FARM**

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Diseases of reproduction organs of dairy cows in the postnatal period, which cause long service periods, deregulation estrus, infertility and rejection are one of the main problems of dairy farm and require constant attention of managers and veterinary professionals. The gynecologic diseases of ovary cows such as luteal or follicular cysts, persistent corpus luteum, hypofunction or sclerotic degeneration of the ovaries, endometritis in various forms can be caused by feeding with wrong or not completed treatment of surgical and infectious diseases, complications at the calving. Due to this, there is particular scientific and practical interest in study of the structure abnormalities of dairy cows which will help to understand better what violations of technology cause it and how to reduce their appearance in the herd.

The aim of research was to determine the structure of the disturbances in reproduction organs of cows on the example of a particular herd. The study was conducted in experimental state farm "Pasichna" of Khmelnytsky region on Ukrainian black and white dairy breed cows during March-May. With the help of experts farms the cows that did not come to estrus more than two months, or were inseminated more than twice and showed estrus again were selected. The research was conducted three times in 2015.

After examination of problem animals, it was found that besides the cows with pathologies reproductive organs in these groups there were also cows with pregnancy and not pregnant cows without ovarian and uterine abnormalities. Cows without any abnormalities might either exercise "quiet" estrus which is hard to detect, especially in the winter and spring stall period, or might have early or late ovulation relatively to manifestation of outward signs of estrus, which also takes place under intense dairy farming and causes strong difficulties for reproduce specialists in the choice of optimal insemination time for these animals.

So in March on the farm 94 cows were tested, in April — 128 in May — 102, which is about 10 % of the total number of dairy cows. Among these cows 10 ones were pregnant in March, 40 in April and 26 in May, representing 10.6, 31.2 and 25.5 %, respectively, of the animals tested for gynecological pathology. In March 7 cows (7.4 %) were considered doubtfully pregnant due to a small period after insemination (1–2 months) and in May — 6 ones (5.9 %). An examination revealed also cows with no abnormalities which were not inseminated and pregnant. In March there were 11 or 11.8 % such cows, respectively, in April — 13 or 10.1 %, in May — 13 or 12.7 %. So during 3 months in 28 (29.8 %), 53 (41.4 %) and 45 (44.1 %) doubtful cows no abnormalities of reproductive organs were revealed.

There were 66 (70.2 %), 75 (58.6 %) and 57 (55.9 %) sick cows among the doubtful ones in the group. In three testings the follicular cysts were found in 11, 7 and 11 cows, respectively, that is 16.6; 9.3 and 19.3 % of cows with gynecological diseases. Luteal cysts were found in 8 (12.1 %), 4 (5.3 %) and 7 (12.3 %) cows in March, April and May, respectively. Hypofunction ovaries were found in 30 (45.4 %), 37 (49.3 %) and 23 (40.3 %) cows. Persistent corpus luteum was found in 17 (25.7 %) cows in March. During the examination endometritis was found in 30 (45.4 %), 29 (38.7 %) and 23 (40.3 %) cows in March, April and May, respectively. It should be noted that in March in 22 cows and in April in 2 cows with endometritis an ovarian hypofunction was also established, in May was were no such cows.

Thus, the results of this study indicate that endometritis (38,7–45,4 %) and hypofunction of ovaries (40,3–49,3%) were the most common pathologies of reproductive organs of dairy cows in this herd and these diseases often overlapped. So gynecological diseases cows remain an urgent problem and they need constant attention of scientists and veterinary experts.