

Development of the Technology of Transplantation of Embryos of Carnivorous Animals (dogs)

N.L. Shapekova, B.A. Kurmanov

shapekova_nl@enu.kz

Eurasian national Gumilyov University Astana, Kazakhstan

Object of research are purebred and purebred dogs belongs to residents of Astana.

The purpose of work is Development of technology of leaching and transplantation of embryos in carnivorous. In the interim period studied the causes of abnormalities of sexual system function in dogs and their correction.

Methods of work – clinical and laboratory research methods been used. Research equipment had been used: a stethoscope, sphygmomanometer, vacuum-timers, artificial vagina for sheep producers, microscope slides, cover glasses, test tubes, Goryayev counter, biochemical analyzer, «Indesit» refrigerator, «Adventurer» electronic balance, bactericidal irradiator.

In the process of studies aimed establishing the concentration level of sex hormones in the blood of dogs, for the corrections of the manifestation of the sexual cycle.

In experiments semen were taken by artificial vagina used eight males for testing techniques (five mongrel, two German shepherds and one Doberman Pinscher). In the period of development of a technique received 28 experiment samples from ejaculation. After the test the technology for obtaining sperm by artificial vagina from among the most trained left five dogs (shepherd - 8 years, Doberman 9 years and three purebred dogs, age not known). From five dogs ejaculation carried out two times a week in the first week (Tuesday, Friday), from next week received sperm three times a week (Tuesday, Thursday, Saturday).

After each of the fence ejaculating males were in a state of rest. The food consisted of porridge, boiled meat - 150-200 g each and fortified food. Animals in the period of experiments were fed twice a day (morning and evening).

As a result of the studies, 19 dogs were allocated worm infestation and 14 dogs with metabolism disorders, in the result of violations of feeding and as the effects of supplementation infections, 6 of them with inflammation of the mucous membrane of the uterus. All 19 dogs were held deworming. As a treatment used drugs replicating in the body content of micro and macro elements, vitamins, restoration of a mucous membrane of the uterus and improve its contractility. The course was held repeated sampling urine, faeces, blood on comparative studies.

The essence of the novelty of the results of the study is that the dog training market of Kazakhstan does not have a wide choice of breeding dogs. Population cannot satisfy their desires in keeping dogs, due to the lack of interested breeding or their high price. Results will for the first time in the national biotechnological practice to develop a domestic technology embryo-engineering process in this area; to prepare specialists for transplantation work in dogs; ensure the needs of the population in the wide choice of purebred dogs for home detention; monitor and genetic characterization of breeding dogs; create a database of various dog breeds.

The major biotechnology indicators: methods for the treatment of pathologies with the use of new highly effective pharmacological means.

The degree of implementation is developed and proposed for scientific and practical purposes of a comparative analysis of the pathological and physiological state of individual morpho-biochemical indicators of urine and blood, reflecting the state of the reproductive system. It is planned the edition of methodical guidelines for the diagnosis and treatment of diseases affecting the sexual system of dogs.

Field of application - medical and veterinary biochemistry, medical biotechnology, in particular, the biological research Institutes, medical and veterinary profile, veterinary clinics.

The efficiency of development is determined by the detection of internal changes in the organism of dogs, affecting the normal functioning of the reproductive system of dogs.

Prognosis proposals on the development of research objects – taking sperm, artificial insemination, leaching and embryo transfer will be tested and developed by further research.

References

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