

TREATMENT OF PASTEURELLOSIS-AFFECTED CALVES WITH ANTIBIOTICS

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TREATMENT OF PASTEURELLOSIS-AFFECTED CALVES WITH ANTIBIOTICS

[Following is the translation of an article by N. I. Anpilov, Veterinarian, "Vityazevo" State Farm, Krasnodarskiy Kray, appearing in the Russian-language periodical Veterinariya (Veterinary Science), 1963, No 12, pages 54-55. Translation performed by Sp/7 Charles T. Ostertag Jr.]

On one of the dairy farms of our state farm, hemorrhagic septicemia was diagnosed among calves ranging from 20 days to three months in age. In the sick animals there was noted a lack of appetite, sluggishness, muscular tremor, constipation, alternating with diarrhea (traces of blood were in the feces), difficult respiration, epiphora and hemoglobinuria.

The animals died on the first or second day of illness. Upon autopsy, sharply expressed hemorrhagic diathesis was established in them (punctate and maculous hemorrhage on the mucous membrane and tunica serosa, parenchymatous organs and urinary bladder). The clinical and pathoanatomical diagnosis was supported by bacteriological investigation.

For the treatment of the calves we used antibiotics intramuscularly: Mycerin, tetracycline, oxytetracycline (terramycin) and Bicillin-3. The sick animals were divided into three groups. The eight calves of the first group received mycerin once each 24 hours for three -- four days in succession. On the first day they received a dose of 15-20 thousand units per one kilogram of animal weight, on the second day -- 10 thousand, on the third day -- 8 thousand each, and on the fourth day -- 5 thousand units per one kilogram of animal weight. All the calves recovered.

The calves (8) of the second group were treated with oxytetracycline. The preparation was administered once each 24 hours for a period of five days: On the first day -- 15-20 thousand units each, the second -- 10 thousand units, the third day -- 6-8 thousand units, and on the following days -- 4-5 thousand units per one kilogram of animal weight. During this, one calf died and a relapse of illness was noted in another.

The calves of the third group were injected with tetracycline once each 24 hours for a period of five days: On the first day -- a dose of

10-20 thousand units, on the second day -- 6-8 thousand, the third day -- 4-6 thousand units each, and on the fourth and fifth days -- 4 thousand units per one kilogram of calf weight. Out of the eight calves treated, seven recovered and a relapse of the disease was observed in one.

Bicillin-3 was introduced into four calves in a dose of 15 thousand units on the first day, and subsequently 10 thousand units each per one kilogram of animal weight. All the treated calves died.

Prior to being administered to the calves, the antibiotics mycerin, tetracycline and oxytetracycline were dissolved in a 1-2% solution of Novocaine, and Bicillin-3 -- in distilled water.

Thus the most effective was mycerin in a dose of 5-20 thousand units per one kilogram of animal weight and administered to the calves for a period of four days. Already on the second or third day of treatment the body temperature of the animals had dropped to normal.

No complications were observed after using mycerin.