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Research Article

**EXPERIENCED, COMMISSION AND PRODUCTION TESTS OF
THE EFFECTIVENESS OF THE NEW DRUG ALBEFEN
GRANULATE 10% IN MIXED INVASION OF INTESTINAL
NEMATODOSES OF SHEEP**

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Abstract:

Nematodoses of the gastrointestinal tract of sheep and goats in the North Caucasus are more often represented by the helminthes of the Strangulate suborder, which occur in 37-100% of lambs in the form of associative invasions, which require the development of new domestic complex preparations. for their treatment and prevention. In experiments with group assignment that the new multidisperse anthelmintic drug Albefen granulates 10% at a dose of 30 mg / kg body weight, mixed with feed 1:100, showed EE and IE - 100% and is recommended as an effective facilities deworming against nematodes of gastrointestinal tract. For drug Albefen granulate 10%, a dose of 30 mg / kg of body weight for the gastrointestinal nematodoses of sheep is therapeutically effective. Extensefficiency of the new anthelmintic composition Albefen granulate 10% at a dose of 30 mg / kg of body weight against associative invasion of nematodes of the gastrointestinal tract of sheep during the commission tests amounted to 90,00% with intensefficiency (IE) – 94,74%. Extensefficiency of the new anthelmintic composition Albefen granulate 10% in a dose of 30 mg / kg of body weight against the background of associative invasion of nematodes of the gastrointestinal tract of sheep during production tests amounted to 85,20%, with IE of the drug - 91,34%. The complex anthelmintic compound Albefen granulate 10% in a dose of 30 mg/ kg body weight, mixed with 1:100 feed experimentally, in commission and production experiments is a highly effective drug and is recommended for the treatment and prevention of nematodes of the gastrointestinal tract of sheep for group administration with feed.

Key words: Sheep; myxinvasia; intestinal nematodes, drug; Albefen granulate 10%; dose; extensefficiency; Intensefficiency.

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INTRODUCTION:

Strongylatoses of the gastrointestinal tract of sheep and goats on the territory of the subjects of the North Caucasus in population of young animals is found with EI from 53.5 to 100% [1, 4, 5, 7, 10, 13, 15, 16, and 17]¹. Young sheep have epizootic manifestations of invasion with EI of 45–89% [2, 4, 7, 8, 9, 16, 17] with the formation of pasture biotopes over a large territory [5, 8, 10,16,17]. In this regard, the development of new complex drugs for the treatment and prevention of intestinal nematodes of sheep is an important task [1,2, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16,17]². The goal is to check the anthelmintic activity of the drug Albefen granulate 10% in case of mixed invasion of intestinal nematodes of young sheep by the group method.

MATERIALS AND METHODS:

Experiments to test the anthelmintic activity of the drug Albefen granulate 10% in mixed invasion of gastrointestinal nematodes in young sheep were conducted on 18 heads. Experimental and control lambs (n = 36) were divided into 3 groups of 12 animals each. Young ewe 1 group (n = 12), infected with mixed invasion of gastrointestinal nematodes, was given the anthelmintic drug Albefen granulate 10% at a dose of 20 mg / kg body weight, group 2 of lambs (n = 12) at a dose of 30 mg / kg body weight, once, also by group method. Young ewe of the 3rd group (n = 12) served as a control, as infested with intestinal strongylatosis, not receiving a new anthelmintic drug Albefen granulate 10% with food. According to the scheme of the experiment, after 3, 5, 7, 10 and 15 days after a single injection of the new drug, Albefen granulate 10%, the feces of all individuals underwent coprolarascopy [6,16,17].

Commission tests of Albefen granulate 10% were carried out on 100 lambs, production experiments on 500 individuals of Karachai lambs. The results of experimental testing of the anthelmintic composition Albefen granulate 10% with strongylatosis of young sheep were subjected to statistical processing using the “Biometrics” program.

RESULTS:

New anthelmintic drug Albefen granulate 10% per 1 g of powder includes: albendazole 250 mg, fenbendazole 200 mg, copper chelate 150 mg, dry bentonite 400 mg. In the 1st experimental group (n = 12) sheep with mixed invasion of nematodes of the gastrointestinal tract when administered with the group method of the new drug Albefen granulate 10% at a dose of 20 mg / kg of body weight with food 1: 100, showed a rather high extensefficiency - 91, 67% and intensefficiency (IE) – 94,74% (Table 1). At the same time, in the 2nd group of lambs (n = 12) with mixed invasion of intestinal nematodes, a new anthelmintic composition Albefen granulate 10% in a dose of 30 mg / kg of body weight showed extensefficiency 100% with i intensefficiency (IE) - 100%.

This dosage of the new composition Albefen granulate 10% should be recognized as an effective therapeutic dose (Table 1). Yarki of the 3rd group (invasive control, n = 12) remained infected with intestinal nematodes when detecting 70,5-73,3 ekz. of eggs and larvae in 5 g of feces.

Table 1- Efficacy of Albefen granulate 10% anthelmintic composition in associative invasion nematodes of gastrointestinal sheep

Group	The number of infected lambs	The number of free from nematodes of lambs after treatment	EE, %	The number of eggs and larvae of nematodes in 5 g of feces of lambs, ekz.		IE, %
				Before therapy	After therapy	
1	12	11	91,67	68,4±6,2	3,6±0,5	94,74
2	12	6	100	72,6±7,8	-	100
3	12	0	0	70,5±7,6	73,3±7,8	0

Extensefficiency of the new anthelmintic composition Albefen granulate 10% at a dose of 30 mg / kg of body weight against associative invasion of nematodes of the gastrointestinal tract of sheep during the commission tests amounted to 90,00% with intensefficiency (IE) – 94,82% (Table 2).

Table 2- Efficacy of Albefen granulate 10% anthelmintic composition in associative invasion nematodes of gastrointestinal sheep at commission tests (according to coprolaroscopy)

Group	The number of infected lambs	The number of free from nematodes of lambs after treatment	EE, %	The number of eggs and larvae of nematodes in 5 g of feces of lambs, ekz.		IE, %
				Before therapy	After therapy	
1	100	90	90,00	65,7±5,3	3,4±0,4	94,82
2	100	0	0	67,2±6,4	69,5±5,3	0

Extensefficiency of the new anthelmintic composition Albefen granulate 10% in a dose of 30 mg / kg of body weight against the background of associative invasion of nematodes of the gastrointestinal tract of sheep during production tests amounted to 85,20%, with intensefficiency (IE) of the drug - 91,34% (Table 3),

Table 3- Efficacy of Albefen granulate 10% anthelmintic composition in associative invasion nematodes of gastrointestinal sheep during production tests (according to coprolaroscopy)

Group	The number of infected lambs	The number of free from nematodes of lambs after treatment	EE, %	The number of eggs and larvae of nematodes in 5 g of feces of lambs, ekz.		IE, %
				Before therapy	After therapy	
1	500	426	85,20	67,0±7,2	5,8±0,7	91,34
2	100	0	0	70,3±7,6	73,5±7,9	0

Thus, the complex anthelmintic compound Albefen granulate 10% in a dose of 30 mg / kg body weight, mixed with 1:100 feed experimentally, in commission and production experiments is a highly effective drug and is recommended for the treatment and prevention of nematodes of the gastrointestinal tract of sheep for group administration with feed.

DISCUSSION:

The test results of the new anthelmintic drug Albefen granulate 10% against the gastrointestinal nematodes of sheep were obtained by us for the first time. New data were obtained on the therapeutic efficacy of Albefen granulate 10% at a dose of 30 mg

/ kg of body weight of lambs. At the same time, information on the need to develop methods for group treatment and prevention of mixed invasion of gastrointestinal nematodes of sheep is consistent with the positions of many well-known authors [1,2, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16,17]³.

CONCLUSION:

For the new anthelmintic drug Albefen granulate 10% , in the gastrointestinal nematodes of sheep, a dose

of 30 mg/ kg of body weight is therapeutically effective. During the experiments, Albefen granulate 10% at a dose of 30 mg / kg body weight in a mixture of 1:100 with food once showed a 85,2-100% effect in mixed invasion of nematodes of the gastrointestinal tract of sheep by the group method. The complex anthelmintic compound Albefen granulate 10% in a dose of 30 mg / kg body weight, mixed with 1:100 feed experimentally, in commission and production experiments is a highly effective drug and is recommended for the treatment and prevention of nematodes of the gastrointestinal tract of sheep for group administration with feed.

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