PECULIARITIES OF FUNCTIONING OF EUNO ILEAL PAYER'S PATCHE OF PIGS INTESTINE IN DIFFERENT STRESS PERIODS WHEN YOU TURN TO DIET SUPPLEMENTS "B-GLUCAN" AND "BIOVIR"

Stojanovskyj V.G., Matsjuk O.I., Kolomijets I.A.

The article presents data on topography and morphometry of euno ileal Payer's patche of pigs intestine at 28 days of life (weaning period) and at different stages of resistance, that is, after 20 and 60 days after weaning.

Key words: euno ileal Payer's patche, intestine, weaning, stress, piglets, supplements.

The topicality of this kind of research due to the fact that the body of pigs is sensitive to various stress factors, primarily, changes in feeding, which occurs when weaning from the sow and causes digestive disorders, dyspepsia, afahiya, weight body loss and death. The disorders of the digestive system change the activity of other organs and systems, but first of all, they can have an influence on the immune system as the gastrointestinal (GI) tract and the whole body. The purpose of our work was to study the peculiarities of the intestinal immune barrier of piglets during weaning and at different post stress periods in the background of including into the diet the fodder additive "B-glucan" and "Biovir."

Material and methods of research. Experiments conducted on clinically healthy pigs of 5-90-days of age of Poltava White breed in conditions ESPC "Davydivskyj" LNU of VM and BT name after S.Z. Gzhytskyj. After 28 days of life piglets were weaned from sows.

The control (C) group of piglets received a standard combined feed and piglets of (D_1 and D_2) experimental groups of 5- to 45-days old were respectively fed with fodder additive "B-glucan" and "Biovir" in the amount of 10 mg / kg of body weight per day . To perform the task in the morning, to animals feeding from each group of piglets at 28 days of life (weaning), on 58 days of life (day 20 after weaning), on 88 days of life (day 60 after weaning) were taken three

animals and after a light anesthesia it was performed slaughtered with the help of decapitation. For the studies it was selected stretches of thin and thick gut where were macroscopically studied topography and morphometry of peueric plaque (PB) by Hellman method [4].

Results of search. According to the research results during weaning period (day 28 of life) in the small intestine of piglets C, D_1 and D_2 groups one long Payer's patche (PP) was functioned (from the literature sources euno ileal PP). In pigs of group C in the initial part of plaque width was on average 2.25 ± 0.10 cm. In the middle of the part its width was 1,10 ± 0,9 cm. End portion of euno ileal PP was narrow sphenoid shape, here it widthv was 0 9 ± 0.05 cm. The length of the plaque was 109.34 ± 8.95 cm. As part of the plaques dome-shaped lymphoid nodules were isolated (LN), which placed tightly and their form gave plaque undulating form. In pigs of group D_1 which were receiving supplements "B-glucan", the initial width of euno ileal PP was o average 2.30. ± 14 cm in the mf group D_2 which were receiving supplements "Biovir", the initial width of plaque on average was 2.40 ± 0.11 cm, in the final part - 1.0 ± 0.09 cm. Plaque was not interrupted, and its length was 118.59 ± 16.07 cm.

Within 20 days after weaning that corresponds the stage of resistance (by Selje) in piglets of group C the width of euno ileal PP in the initial part was on average 2.64 ± 0.10 cm, in the final part - 1,1 ± 0,08 cm. Defects in the structure of plaques at the macroscopic level were not found out, plaque was not interrupted, and its length on average the group was 123.87 ± 19.50 cm. The structure of plaques almost some nodules or their domed options did not differ.

In pigs of group D_1 in 20 days after weaning euno ileal PP was on average 173.76 ± 25.12 cm. In the initial part of its width was on average 2.01 ± 0.07 cm, in the final part - 1.5 ± 0.08 cm. Compared with the group C of animals, euno ileal PP of pigs of group D_1 was significantly longer, but almost equal to the width as the original, and in the final part. Defects in the structural organization of piglets plaque of group D_1 at the macroscopic level is not found out. In its anatomic structure and topography, plaque was similar to pigs of group C, but

morphologically in its thickness you could distinguish individual domed nodules that are well painted. In pigs of group D_2 20 days after weaning, length of euno ileal PP was on average 135.49 ± 21.40 cm. In the initial part its width was on average 2.78 ± 0.13 cm in the final part - 0 97 ± 0.06 cm.

It was found that 60 days after weaning the length of euno ileal PP on average in group C was 145.60 ± 17.31 cm, in animals of group D_1 - 160.70± 28.70 cm, in animals of group D_2- 140.26 ± 22.98 cm. Macroscopically, defects in the structure of piglets plaques of all groups were not found.

Conclusions. During weaning period (day 28 of life) in the small intestine of piglets from group C euno ileal PP the length 109.34 ± 8.95 cm is functioning while the animals of group D_1 and D_2 which were receiving supplements "B-glucan" and " Biovir ", its length is respectively 125.34 ± 10.76 and 118.59 ± 16.07 cm. At various stages under resistance in the structure of piglets plaques from group C some nodules or their domed options do not differ, while in animals from the research groups, especially group D_2, they painted intensively, especially in the final part, which may indicate a positive influence of additive "Biovir" on the reactivity of the patche lymphoid tissue.