UDC:619:636.31:616.9

EPISOTOLOGICAL MONITORING OF SHEEP PARAMPHISTOMATOSIS IN DIFFERENT BIOGEOTCENOSES OF SAMARKAND REGION

Akhmedov Sunnat Mukhitdinovich
independent researcher, assistant
Daminov Asadullo Suvonovich *v.f.d., professor*
Kuliev Bohodir Amridinovich, *Ph.D., associate professor*
Samarkand State Veterinary Medicine, Animal Husbandry and Biotechnology University

Abstract: *In this article, the spread of gastrointestinal trematodes (paramphistoma) among sheep in the mountainous and irrigated areas of Samarkand region was analyzed according to the results of helmintocoprological examination and complete helminthological examination.*

Keywords: *paramphistomatosis, helmintocoprologic, biogeocenosis, extent of invasion, intensity of invasion, pathologoanatomical, mollusk, cercaria, mountain-mountain, irrigated zone.*

Relevance of the topic. The causative agent of gastrointestinal trematodosis, including sheep paramphistomatosis, causes various pathological changes in the body of the main host during their complex biological development stages, mainly by feeding on blood, and the increase in the extent of their invasion has a significant negative impact on livestock development.

The purpose of the research. The research was conducted in the years 2019-2022 on sheep of different ages in the mountain-mountain zone of Samarkand region, Urgut, Toyloq districts, as well as in the irrigated plain zone, Bulung'ur and Jomboy districts.

Research materials and methods. The research was conducted on a total of 682 sheep of different ages belonging to the irrigated and mountainous biocenoses of Samarkand region, in particular: 164 sheep in Urgut district, 189 sheep in Toyloq district, 145 sheep in Bulungur district, 184 sheep in Jomboy district, helminthocoprological examination of sheep and organs were carried out using complete helminthological (TGH) methods.

Research results. In 2019, in Urgut district, 38 sheep of different ages were subjected to helminthocoprological examination, and paramphistome eggs were found in 11 of them. The extent of infestation was 28.94%. In proportion to the above, the results of the research conducted in 2020-2022 are 41:13:31.7%; 43:13:30.23%; It was 42:13:30.23%. The average indicator for the district was 164:50:30.3%.

In Toyloq district, the same indicators for 2019-2022 were proportionately 45:13:28.88%; 47:14:29.78%; 51:16:31.37%; The percentage was 46:14:30.43%. The average rate was 189:57:30.15%.

The total number of examined sheep in the Urgut and Toyloq, i.e. mountainous areas, was 353. When analyzing their paramphistoma infestation, 107 of the examined 353 sheep were infected with paramphistomatosis, and the average extent of infestation was 30.3%.

When analyzing the spread of paramphistomatosis among the population and sheep of different ages in the irrigated Bulung'ur and Jomboy districts of the region, similar indicators were observed.

The number of animals and the extent of infestation in Bulung'ur district in the period 2019-2022 were shown as follows in accordance with the above: 36:9:25%; 34:10:29.41%; 40:11:27.5%; 35:10:28.57%, the total indicator for the district is 145:40:27.58%, and in Jomboy district it is 184:55:29.89% in the above mentioned years; When we analyzed the irrigated districts of Bulung'ur and Jomboy, the total number of examined animals was 329, of which 95 were infected, and the extent of infestation was 28.87% on average.

The analysis of mountainous and irrigated zones showed similar indicators. In the mountainous zone, the level of invasion was 30.3% on average, and in the irrigated zone it was 28.87%.

The total number of examined sheep in the region was 682, of which 202 were infected, and the extent of infection was 29.61%.

In the above biogeocenoses, 682 sheep from a total of 682 small-horned animals were examined using the "Helmintocoprological serial washing" method, and 256 sheep were examined using the "Complete helminthological dissection and pathanatomical examination" methods.

Analyzing gastrointestinal trematodes (paramphistomatosis), which is spreading widely among the districts of Samarkand region, in the Urgut, Toyloq, Bulung'ur, Jomboy districts of the region, the following indicators were found (in the period of 2019-2022) results of TGI inspection.

In 2019, in Urgut district, 5 out of 16 sheep suspected of having a disease or forcibly slaughtered were infected with the disease, and the extent of infection was 31.25%. The results of the inspection conducted in 2020-2021-2022 in accordance with the above were shown as follows: 10:3:30%; 17:5:29.41%; 19:6:31.58%. This indicator for the district was 62:19:30.64%.

The indicator in Toylok district is 14:4:28.57% in accordance with the above; 19:6:31.58%; 20:6:30%; It was 16:5:31.25%. This indicator for the district was 69:21:30.43%.

The total number of animals examined in two districts was 131, of which 40 were infected, and the average extent of infestation was 30.53%.

In accordance with the analysis of the research carried out in the irrigated Bulung'ur and Jomboy districts of the region, Bulung'ur district is 11:3:27.27%; 13:4:30.77%; 15:4:26.67%; It was 14:4:28.57 percent. This figure for the district was 53:15:28.30%. 10:3:30% in Jomboy district; 17:5:29,415; 22:7:31.82%; It was 23:7:30.43%. This figure for the district was 72:22:30.55%.

When both irrigated zones were analyzed, the total number of examined animals was 125, of which 37 were infected, and the extent of infestation was 29.6%.

When we compared the mountain-mountain zone with the irrigated zone (30.53% - 29.6%), it was found that the IE was slightly higher in the mountain-mountain zone.

Analyzing the results of the regional health inspection, this indicator was revealed, the total number of inspected animals was 256, of which 77 were infected, and the IE was 30.07 percent.

According to coprological examination data, eggs of paramphistomates were found in the dung samples of 204 heads or 29.91 percent of 682 head animals examined.

In the districts of our province, sheep of different ages affected by paramphistomatosis appeared in the form of sheep when we analyzed the results of TGI examination by seasons.

During the years 2019-2022, a total of 256 sheep of different ages died from disease or were forcibly slaughtered were subjected to pathologoanatomical examination, including 17 heads of 62 sheep in the spring season, i.e. 27.42%, 15 heads of 53 sheep in the summer season, 28 ,30%, we found out that 22 out of 72 sheep, i.e. 31.88%, were infected with paramphistomatosis. Out of 256 examined sheep, 76 were infected with paramphistomatosis, and IE averaged 29.69%. If we analyze the incidence of paramphistomatosis in sheep according to the time of year, the lowest infection occurred in the spring season. Because this period, i.e. in the winter, the activity of molluscs decreases, the infection of sheep with paramphistome parasites developed in the mollusc organism, i.e. juveniles free of cercariae, is greatly reduced. This fully corresponds to the biological development of paramphistomes. The highest level of infection of sheep with larvae of paramphistomes, that is, parthenites, corresponds to the winter season (31.88%). The reason is that optimal (favorable) conditions for the development of molluscs appear in autumn. During this period, sheep are exposed to external fodder, partly through water. Therefore, according to the data of most authors and our personal

investigations, it was observed that the incidence of paramphistomatosis in cattle and sheep reaches its maximum level in the winter months.

Conclusion: 1. The epizootological condition of sheep paramphistomatosis is directly related to the bioecological factors of the external environment (that is, the seasons, temperature, humidity, light, the passage of the year with dry spells, drought), and the extent and intensity of the invasion changes. 2. According to the results of the helmintocoprological examination conducted in four districts of Samarkand region, the extent of invasion in sheep was 29.61% on average, and according to the results of TGI examination, it was 30.07% on average.

List of used literature:

1. Ахмедов С.М., Даминов А.С., Кулиев Б.А.“Парамфистоматознинг эпизоотологияси ва патоморфологияси” Veterinariya meditsinasi jurnali. Toshkent. 2022. № 2. 17-18 b.

2. Бибик О.И. Морфофункциональная характеристика органов и тканей паразита и хозяина при трематодозах после химиотерапии антигельминтиками. //Диссертациядокт.биол.наук. Москва, 2012. – С. -308-311.

3. Василева Е.А. Эпизоотология трематодозов крупного рогатого скота и совершенствование системы противотрематодозных мероприятий в республике алтай. //Автореферат. Диссертации канд.вет.наук. Тюмень, 2010. – С. 17-19.

4. Даминов А.С. Республиканинг турли биогеоценозларида қорамоллар трематодозларининг эпизоотологик ва иммунологик хусусиятлари. //Докторлик диссертацияси. Самарқанд 2016. – С. 197-200.

5. Кожабоев М. «Ассоциация инвазия трематода крупного рогатого скота «Приаралья». //Автореферат.дисс. канд. биол. наук. Институт Зоологии Ан.Уз 2001. -С. 24.

6. Поцхверия Ш.О. Распространения парамфистоматоза крупного рогатого скота в Грузии. //Ветеринария 1996, № 10. – С. 29.

7. Салимов Б.С. Трематодозларнинг эпизоотологик ҳолати. //Зооветеринария журнали. №1. Тошкент, 2008. –Б.20.

8. Салимов Б.С., Эримов С., Тайлоқова М. Қўйларнинг парамфистоматозлари тўғрисида янги маълумотлар. //Зооветеринария журнали, Тошкент, 2015, № 1, 14-16 б.

9. Шемякова С.А. Трематодозы крупного рогатого скота (эпизоотология, патогенез, диагностика) и меры борьбы с ними в центральном регионе российской федерации. //Автореферат. Диссертации докт.вет.наук. Москва, 2018. – С. 35-39.

10. S Ахмедов, АДаминов, БКулиев, ЭБобонazаров - Вестник ветеринарии и животноводства (ssuv. uz), №-2. 2022 ПАТОГЕНЕЗ, ДИАГНОСТИКА, ЛЕЧЕНИЕ И ПРОФИЛАКТИКА ПАРАМФИСТОМАТОЗА.(По литературным данным) 21-27.

11. SM Axmedov, AS Daminov, BA Kuliyev. PARAMFISTOMATOZDA QO‘YLAR ICHKI ORGANLARIDAGI PATANATOMIK VA PATOGISTOLOGIK O‘ZGARISHLAR Journal of Agrobiotechnology and Veterinary Medicine 2022/10/15.52-56.

12. Mukhitdinovich, A. S., Suvonovich, D. A., &Amridinovich, K. B. (2023). PATHOGISTOLOGICAL CHANGES IN ORGANS IN SHEEP PARAMPHISTOMATOSIS. *Conferencea*, 113-117.